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cagggttacg accetcaggt cgaggeccgg ttccacgagg ctgtcgagat getaatagag
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Ala Ser Phe Gln Ala Pro Leu Ala Leu Gly Thr Asp Thr Gly Gly Ser
                            40
Ile Arg Gln Pro Gly Ala Val Thr Gly Thr Val Gly Ile Lys Pro Thr
                                            60
                        55
Tyr Gly Ser Thr Ser Arg Tyr Gly Val Ile Ala Met Ala Ser Ser Leu
                                        75
                    70
65
Asp Thr Pro Gly Pro Cys Ala Arg Thr Val Leu Asp Ala Ala Leu Leu
                85
                                    90
His Gln Ala Ile Ala Gly His Asp Ala Met Asp Gln Thr Thr Ile Asn
            100
                                105
Gln Pro Thr Pro Ala Val Val Glu Ala Ala Arg Gln Ala Asp Val Ser
                            120
                                                125
Gly Val Arg Ile Gly Val Val Thr Glu Leu Ser Gly Gln Gly Tyr Asp
                        135
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Pro Gln Val Glu Ala Arg Phe His Glu Ala Val Glu Met Leu Ile Glu
                                       155
                    150
Ala Gly Ala Glu Val Val Glu Val Ser Cys Pro Asn Phe Asp Leu Ala
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Leu Pro Ala Tyr Tyr Leu Ile Gln Pro Ala Glu Val Ser Ser Asn Leu
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Ala Arg Tyr Asp Ala Met Arg Tyr Gly Leu Arg
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gatgaagttg gtgctgttgc ggggagtgta tgcctcgttt gggcatccgc tgttcaccag .
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                                                    30
           20
Val Glu Glu Ser Cys Lys Ala Leu Val Leu Phe Ala Leu Ala Ile Gly
       35
                            40
Met Gly Arg Arg Met Thr Ser Val Val Gln Thr Val Ser Met Ala Gly
                                            60
   50
                       55
Leu Ser Ala Ile Gly Phe Ala Phe Val Glu Asn Ile Met Tyr Tyr Ala
                                        75
Arg Ala Asp Asn Tyr Ala Arg Val Thr Ala Ser Gly Gly Asp Pro Lys
               85
                                    90
Gln Gly Val Asp Glu Val Gly Ala Val Ala Gly Ser Val Cys Leu Val
           100
                               105
Trp Ala Ser Ala Val His Gln His Asp Gly Tyr Arg Ser Gly Pro Trp
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                           120
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Ala Glu Val Thr Lys Leu
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aatccggaac gtgcgctcga gcgtcgtaac ctggtgctgg atgtgctgga acagcagggt
gtagccactg ccgaacaagt cgctgccgca aagaaaatgc cgctgggtgt aaccactcgc
360
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gaagattacc gcgacgaaga cttgaccgaa gaaggcctgc ggattttcac cagtttcgac
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Tyr Ser Lys Gln Glu Ile Leu Glu Ala Tyr Leu Asn Glu Val Phe Val
            20
                                25
Gly Gln Asp Gly Gln Arg Ala Val His Gly Phe Gly Leu Ala Ser Gln
                            40
                                                45
       35
Phe Phe Phe Gly Gln Pro Leu Ser Glu Leu Lys Leu His Gln Val Ala
                                            60
                        55
Leu Leu Val Gly Met Val Lys Gly Pro Ser Tyr Tyr Asn Pro Arg Arg
                                        75
Asn Pro Glu Arg Ala Leu Glu Arg Arg Asn Leu Val Leu Asp Val Leu
                                   90
               85
Glu Gln Gln Gly Val Ala Thr Ala Glu Gln Val Ala Ala Ala Lys Lys
                                                   110
           100
                               105
Met Pro Leu Gly Val Thr Thr Arg Gly Lys Leu Ala Asp Ser Ser Phe
                                                125
                           120
       115
Pro Gly Phe Ile Asp Leu Val Lys Arg Gln Leu Arg Glu Asp Tyr Arg
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                        135
                                            140
Asp Glu Asp Leu Thr Glu Glu Gly Leu Arg Ile Phe Thr Ser Phe Asp
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                                       155
Pro Ile Leu Gln Met Lys Ala Glu Ala Ser Val Asn Asp Thr Phe Lys
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                                                       175
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Arq Leu Thr Gly
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180
gcaagaaatc gcggtgagct gcgtgcgcct gctgggtgcc gcctgccact acggcaagac
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ccagogotac ggogactgcc atgatgaccg aaaggacgcg acccctaata gatgcagtca
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totttotoot toacaaagta tttggtaatt gtoacttago tttatogoto ggaatotgtg
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                                                     30
His Ala Ala His Arg Asp Phe Leu Arg Ala Asp Ser Thr Gly Thr Cys
       35
                            40
Glu Trp Asp Gln Val Gly Trp Trp Val Gln Arg Cys Asp Val Trp Ser
                                            60
Gln Ala Met Gly Arg Asn Ile Pro Val Gln Ile Pro Pro Ala Lys Asn
                                        75
                    70
Gly Gly Asn Ala Gly Leu Tyr Leu Leu Asp Gly Leu Arg Ala Thr Asp
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Arg Thr Asn Ala
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<211> 396
<212> DNA
<213> Homo sapiens
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tgccgcaagg caatttactt ccacgtcacg gccgatgcga tgaagatgac gattcgtcaa
120
cggatgggac tgatcccgta cgaggcgatc gtgggcggga cgatgatgat cgtggcgacg
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ttgctgtacg gattcatttt gtagcataaa taaggagggg ttcgatgaac aggaaaaccc .
tttctgttgg cacccgattc gttcaaggaa agcatgacgg caaaagaagt ctgtatcgcg
atggaaaaag gactgagccg cgtctacccc gacgcccggt ttatccatgt gccgatggcg
gacggaggcg aaggcacggt gcagtcgctg gtcgac
396
<210> 1608
<211> 56
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Thr Ala Lys Glu Val Cys Ile Ala Met Glu Lys Gly Leu Ser Arg Val
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Tyr Pro Asp Ala Arg Phe Ile His Val Pro Met Ala Asp Gly Glu
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Gly Thr Val Gln Ser Leu Val Asp
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geggeeegae tgegtagteg egteatetea gtgeaeatet gttetteeee geteatgagg
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                                25
Pro Phe Pro Val Phe Asp Pro Gly Arg Ile Leu His Ile Ser Ile Asp
                           40
Asp Ile Asn Ala Ala Arg Glu Arg Ile Val Pro Ala Gly Ser Thr Arg
                                            60
                       55
Ala Arg Leu Leu Ala Leu His Lys Ala Gly Cys Asp Ile Ala Glu Ile
                                        75
                   70
Ala Thr Met Leu Asp Val Thr Met Ser Tyr Ala Ala Asn Leu Met Ser
                                    90
               85
Gly Glu Glu Gln Met Cys Thr Glu Met Thr Arg Leu Arg Ser Arg Ala
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            100
                               105
Ala Cys Glu Ala Arg Gly Leu Leu Ser Thr Ala Glu Ser Met Ala Ser
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<211> 532
<212> DNA
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agaatgttcg atggtattga attccgtggt ttttcacaac aagctggtga agatttagcg
aagttetetg gtgtaceggg gtggaatgga ttaacagaeg attggeatee tacacaaatg
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ggtgttaatg taagaatttg tacacctaaa tcattaaatc caaaagaggc atatgttgat
attgcaaaag aaaaagcgag tcaatatggt ggttcagtca tgattacgga taatattgca
gaagcagttg aaaatacaga tgctatatat acagatgttt gggtatcgac gg
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<211> 177
<212> PRT
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Glu Phe Leu Gly Lys Asn Asp Ile Gln Leu Gly Lys Lys Glu Ser Val
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Glu Asp Thr Ala Lys Val Leu Gly Arg Met Phe Asp Gly Ile Glu Phe
                            40
Arg Gly Phe Ser Gln Gln Ala Gly Glu Asp Leu Ala Lys Phe Ser Gly
                        55
   50
Val Pro Gly Trp Asn Gly Leu Thr Asp Asp Trp His Pro Thr Gln Met
                                        75
Leu Ala Asp Phe Met Thr Ile Lys Glu Asn Phe Gly Tyr Leu Glu Gly
                                    90
               85
Ile Asn Leu Thr Tyr Val Gly Asp Gly Arg Asn Asn Ile Ala His Ser
                                                    110
                               105
           100
Leu Met Val Ala Gly Ala Met Leu Gly Val Asn Val Arg Ile Cys Thr
                                                125
                           120
       115
Pro Lys Ser Leu Asn Pro Lys Glu Ala Tyr Val Asp Ile Ala Lys Glu
                        135
                                            140
   130
Lys Ala Ser Gln Tyr Gly Gly Ser Val Met Ile Thr Asp Asn Ile Ala
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                   150
Glu Ala Val Glu Asn Thr Asp Ala Ile Tyr Thr Asp Val Trp Val Ser
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                                    170
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gtatcaatac aacttgcgaa atgcagacaa ggcccaggcc taagacatgg tagacataca
tatatacaag gaattcacta tatattgggt gaaaggagat cttcccgttc ctgttcttcc
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aagetgatgt gttegegtga getegatgea gegegetgeg ttgegtgeet tgtggtegat
cgtcgccccg atccgataga atgcggagtt gtattttcgt agtactgctc gacaatgcca
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<212> PRT
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           20
Tyr Thr Leu Ala His Leu Pro Ala Val Ser Ile Gln Leu Ala Lys Cys
                            40
                                                45
       35
Arg Gln Gly Pro Gly Leu Arg His Gly Arg His Thr Tyr Ile Gln Gly
                        55
                                            60
Ile His Tyr Ile Leu Gly Glu Arg Arg Ser Ser Arg Ser Cys Ser Ser
Ser Ala Ala Ser Cys Glu Ala Phe Arg Glu Val Asp Met Asp Asn Val
                                    90
                85
Arg Met Pro Gly Thr Val Lys Cys Arg Gly Leu Val Asp Ala Cys Glu
           100
                               105
Arg Phe Arg Asp Leu Lys Arg Ser Lys Leu Met Cys Ser Arg Glu Leu
                                               125
                           120
Asp Ala Ala Arg Cys Val Ala Cys Leu Val Val Asp Arg Arg Pro Asp
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Pro Ile Glu Cys Gly Val Val Phe Ser
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                    150
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ctactgtgcg gtgagacgat gcaggtgccg ggtgaggacg gcaccatgcc gaaactgttc
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240
cagatatgcc ttgtcatgac ggtgttgtgg gacggtgctt acttggcgat ggcgaccctg
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360
atc
363
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<213> Homo sapiens
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1
                5
Gly Pro Trp Gly Ser Val Leu Val Ser Ala Gly Val Ile Ile Ser Leu
           20
                                25
Leu Gly Ala Leu Leu Ala Trp Ile Leu Leu Cys Gly Glu Thr Met Gln
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40
Val Pro Gly Glu Asp Gly Thr Met Pro Lys Leu Phe Gly Arg Ile Asn
                      55
Lys His Glu Ala Pro Ala Pro Ala Leu Trp Ile Thr Asn Ile Val Ser
                                       75
                   70
Gln Ile Cys Leu Val Met Thr Val Leu Trp Asp Gly Ala Tyr Leu Ala
               85
                                  90
Met Ala Thr Leu Ala Ala Ala Leu Ile Leu Val Pro Tyr Leu Leu Ser
                              105
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Ala Ala Phe Ala Leu Lys Met Val Ile
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gtgcaccgcg ccgtcgagga gaagcacatc ttcggtacca aggagcgctc tgtcatcctg
gatgacgaca aagctggcat cgaaaagatt gtcgaccagc agttcgaact ggccgaacag
gtgcgcgctg cgggtcttgt gccgatcctc gaacccgagg tcgacatcca cgctccacat
aaggagaagg ctgaggaaag gctgcacaac ctcatccgcg agcacatcga ctctctgccg
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ctcattgcgg atccgaaggt cctacgc
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<211> 149
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                                   10
Ile Asp Lys Gly Leu Ala Asp Glu Gly Cys His Val Arg Leu Met Lys
                              25
           20
Pro Ile Pro Gly Leu Asp Glu Leu Val His Arg Ala Val Glu Glu Lys
                           40
His Ile Phe Gly Thr Lys Glu Arg Ser Val Ile Leu Asp Asp Asp Lys
                                           60
  50
                      55
Ala Gly Ile Glu Lys Ile Val Asp Gln Gln Phe Glu Leu Ala Glu Gln
                   70
                                       75
Val Arg Ala Ala Gly Leu Val Pro Ile Leu Glu Pro Glu Val Asp Ile
                                   90
               85
His Ala Pro His Lys Glu Lys Ala Glu Glu Arg Leu His Asn Leu Ile
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105
                                                   110
           100
Arg Glu His Ile Asp Ser Leu Pro Leu Asp Ala Lys Ile Met Leu Lys
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                                               125
Leu Thr Ile Pro Ser Ser Glu Asp Leu Tyr Ala Asp Leu Ile Ala Asp
                       135
                                          140
  130
Pro Lys Val Leu Arg
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acaacaaatg gtgcctccat tcccgccctt ggccttggca ctttccgtat gcccggcgaa
gatgtgette geategteee ttacgegete aaggetggtt ttegeeatgt egatacegeg
cagatttatg gcaatgaagt cgaggtcggt gaagcaattg cgacttccgg cgttcagcgt
ggcgacatct ttctgaccac aaaagtctgg gtagataatt ataagcatga tgctttcatc
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gcatctgtcg atgaaagcct taccaagctt aagaccgact atgtcgatct gctgc
355
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1
                5
Met His Asn Val Thr Thr Asn Gly Ala Ser Ile Pro Ala Leu Gly Leu
                                                   30
                                25
Gly Thr Phe Arg Met Pro Gly Glu Asp Val Leu Arg Ile Val Pro Tyr
                            40
                                               45
       35
Ala Leu Lys Ala Gly Phe Arg His Val Asp Thr Ala Gln Ile Tyr Gly
                                          60
                       55
Asn Glu Val Glu Val Gly Glu Ala Ile Ala Thr Ser Gly Val Gln Arg
                                       75
                    70
Gly Asp Ile Phe Leu Thr Thr Lys Val Trp Val Asp Asn Tyr Lys His
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               85
Asp Ala Phe Ile Ala Ser Val Asp Glu Ser Leu Thr Lys Leu Lys Thr
           100
                                105
Asp Tyr Val Asp Leu Leu
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cccccgaggc ggcggtaggc agcgcgctgg ccccaggagc cacggtcaag gcagaaggcg
180
ctttgeeget ggagetggee actgegegeg gtatgaggga eggegeggee acaaageeeg
acctgcccac ctacctgctg ctcttcttcc tgctgctgct ctcggggggcg ctcggcggcc
tetteategg ttgccagetg egecattegg cettegeege getgeeceae gaeegetteg
ctcgcgacgc ccgcgcgccc ggaagg
386
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<211> 126
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Val Arg Leu Gly Ser Ala Gly Pro Ala Gly His Val Arg Arg His Ile
                                                    30
            20
Gln Arg His Gly Ala Gly Pro Arg Gly Gly Gly Arg Gln Arg Ala Gly
                                                45
        35
                            40
Pro Arg Ser His Gly Gln Gly Arg Arg Arg Phe Ala Ala Gly Ala Gly
                        55
    50
His Cys Ala Arg Tyr Glu Gly Arg Arg Gly His Lys Ala Arg Pro Ala
                                        75
                    70
65
His Leu Pro Ala Ala Leu Leu Pro Ala Ala Leu Gly Gly Ala Arg
                85
                                    90
Arg Pro Leu His Arg Leu Pro Ala Ala Pro Phe Gly Leu Arg Arg Ala
                               105
           100
Ala Pro Arg Pro Leu Arg Ser Arg Arg Pro Arg Ala Arg Lys
        115
                            120
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<212> DNA
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Leu Lys Thr Pro Met Pro Cys Leu Gly Ala Lys His Lys Ala Gln Ser
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Pro Gln Thr Leu Gln Ser Pro Ala Pro Thr His Cys Ala Pro Asp Ser
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Pro Val Phe Pro Asp Tyr Ile Trp Ser Arg Gly Trp Val Glu Lys Leu
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Lys Glu Ser Arg Ser Val Phe Ser His Gly Leu Lys Ile Pro Ile Phe
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Trp Leu Val Asn Arg Leu Pro Gly Leu Lys Asp Leu Leu Leu Ala Gly
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Cys Ser Trp Ser Ala Val Ser Ala Leu Ser Thr Ser Ser Cys Pro Leu
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Leu Arg Thr Leu Asp Leu Arg Trp Ala Val Gly Ile Lys Asp Pro Gln
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Ile Arg Asp Leu Leu Thr Pro Pro Ala Asp Lys Pro Gly Gln Asp Asn
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Arg Ser Lys Leu Arg Asn Met Thr Asp Phe Arg Leu Ala Gly Leu Asp
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                                        380
Ile Thr Asp Ala Thr Leu Arg Leu Ile Ile Arg His Met Pro Leu Leu
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Ser Arg Leu Asp Leu Ser His Cys Ser His Leu Thr Asp Gln Ser Ser
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Asn Leu Leu Thr Ala Val Gly Ser Ser Thr Arg Tyr Ser Leu Thr Glu
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Leu Asn Met Ala Gly Cys Asn Lys Leu Thr Asp Gln Thr Leu Ile Tyr
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Leu Arg Arg Ile Ala Asn Val Thr Leu Ile Asp Leu Arg Gly Cys Lys
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Gln Ile Thr Arg Lys Ala Cys Glu His Phe Ile Ser Asp Leu Ser Ile
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20 25 30 Glu Leu Ceu Gly Phe Ser Lys Asp Asp Ile Thr Asn Gln Val Gln Gln

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Ala Val Gly Ala Leu Gly Leu Pro Pro Leu Glu Asp Glu Asn Ala Gln
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Gly Glu Asp Pro Ala Ser Gln Val Pro Pro Val Thr Asp Glu Asp Pro
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Thr Ala Phe Phe Asp Gln Val Pro Asp Val Pro Leu
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Ala Val Arg Leu Cys Ile Gly Thr Gly Leu Leu Gly Gly Phe Thr Thr
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Tyr Ser Ala Leu Thr Val Glu Thr Gly Gln Arg Val Met Ser Gly Gln
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Trp Leu Trp Gly Ile Ala Tyr Leu Leu Thr Ser Val Val Ala Gly Ala
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Leu Leu Ala Trp Val Met
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Ser Lys Ala Ile Val Trp Asp Glu Tyr Leu Thr Gly Pro Phe Gly Leu
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Ile Ala Gln Tyr Ser Leu Leu Lys Glu His Glu Val Glu Lys Met Phe
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Thr Leu Lys Gly Asn Arg Leu Pro Ala Ala Asp Val Lys Asn Ile Ile
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Phe Phe Val Arg Pro Arg Leu Glu Leu Met Asp Ile Ile Ala Glu Asn
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Val Leu Ser Glu Asp Arg Arg Gly Pro Thr Arg Asp Phe His Ile Leu
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Phe Val Pro Arg Arg Ser Leu Leu Cys Glu Gln Arg Leu Lys Asp Leu
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       115
Gly Val Leu Gly Ser Phe Ile His Arg Glu Glu Tyr Ser Leu Asp Leu
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Ile Pro Phe Asp Gly Asp Leu Leu Ser Met Glu Ser Glu Gly Ala Phe
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Lys Glu Cys Tyr Leu Glu Gly Asp Gln Thr Ser Leu Tyr His Ala Ala
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170
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Lys Gly Leu Met Thr Leu Gln Ala Leu Tyr Gly Thr Ile Pro Gln Ile
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Phe Gly Lys Gly Glu Cys Ala Arg Val Arg Thr Gly Cys Phe Val Val
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                                                205
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Val Lys Glu Gly Pro Ser His Pro Lys Arg Glu Glu Glu Arg Glu Ala
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Pro Tyr Lys Gln Ile Gln Leu Ile Leu Ile Ile Tyr Glu Tyr Cys Thr
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His Glu Phe
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Leu Asp Leu Pro Asn Ser Gly Gln Tyr His Phe Ala Gly His Asp Ile
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Leu Ala Leu Thr Pro Asp Glu Leu Ser Ala Ile Arg Asn Ser Xaa Xaa
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Met Val Val Phe Gln Ser Phe Asn Leu Leu Pro Arg Leu Ser Ala Leu
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Asp Ala Ile Gly Ala Ala Ile Gly Val Ser Arg Phe Ala Ser Met Asn
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Asn Leu Glu Ala Phe Ile Val Leu Asn Asp Ser Asp Ile Asp Pro Thr
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Leu Arg Arg Val Met Asp Glu Ile Asp Lys Lys Pro Glu Leu Lys Glu
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Arg Phe Val Thr Ser Asp Glu Ala Trp Asp Met Met Thr Ser Lys Thr
                                  90
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Thr Val Val Val Asp Thr His Lys Pro Glu Met Val Leu Asp Glu
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Arg Gly Glu Thr
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360
gttatttgga aaaaag
376
<210> 1642
<211> 100
<212> PRT
<213> Homo sapiens
<400> 1642
Met Asp Gly Leu Leu Glu Trp Glu Arg Leu Gly Arg Ser Cys Val Gly
                                    10
1
Trp Val Thr Pro Asn Leu Lys Asn Pro Leu Arg His Met Trp Leu Pro
                                25
Ser Ser Thr Phe Ile Ala Ser Phe Arg Leu Asp Ala Gly Lys Gly Gly
                            40
       35
Leu Gly Gly Gln Arg Glu Leu Leu Phe Ile Gln Glu Leu Cys Tyr Thr
Ser His Phe Thr Cys Ala Thr Cys Ser Gly Leu Asn Cys Ala Ser Pro
                   70
His Ser Tyr Val Glu Val Leu Thr Leu Thr Thr Ser Glu Trp Asp Val
                                                        95
                                    90
                85
Ile Trp Lys Lys
            100
<210> 1643
<211> 494
<212> DNA
<213> Homo sapiens
<400> 1643
aagetteeag aatteeatag gaaceeaget geeettetgg taceteagtg aggtggagee
gagtqtctqa gagcaggtgc aggagaaggt gtgggctcca cctgggcctc tgaagccagg
ggccagaatc cccagatcta ggtccaagag ggggctccat gacctcccca tgctgctcct
180
ctgcttggat ccaggatata agaaaggagg ggcacacact gtgggggaac tctggggtcc
cctgtgtgca tcagcgagtc ccgggtctgc cccaccagga tgcaaagggc ctggctgctc
cagococatg otcacagoco tataagtgca ogatggcaco otatatoato taagoggggo
tgtgcctcct gaggetttag ggacaccaga atgagccccc ctcggcggag tctggctctg
420
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ggtgtgtgga gatgccacct gggacgggaa ccccaggtgc atggagcccc actgcagaca
480
ccatcccccg tgtg
494
<210> 1644
<211> 103
<212> PRT
<213> Homo sapiens
<400> 1644
Met Gly Leu Glu Gln Pro Gly Pro Leu His Pro Gly Gly Ala Asp Pro
                                    10
                                                        15
Gly Leu Ala Asp Ala His Arg Gly Pro Gln Ser Ser Pro Thr Val Cys
                                25
           20
Ala Pro Pro Phe Leu Tyr Pro Gly Ser Lys Gln Arg Ser Ser Met Gly
                            40
                                                45
Arg Ser Trp Ser Pro Leu Leu Asp Leu Asp Leu Gly Ile Leu Ala Pro
                                            60
                       55
Gly Phe Arg Gly Pro Gly Gly Ala His Thr Phe Ser Cys Thr Cys Ser
                                        75
Gln Thr Leu Gly Ser Thr Ser Leu Arg Tyr Gln Lys Gly Ser Trp Val
                                   90
               85
Pro Met Glu Phe Trp Lys Leu
           100
<210> 1645
<211> 330
<212> DNA
<213> Homo sapiens
<400> 1645
nnagatotgt oggataatgg otttggotoc gacatggtga cactggtgct tgccatcggg
aggageeggt etetgaaaca egtggeeett ggaaggaact teaaegtteg gtgeaaggag
accetggacg atgtectgea teggatagee cagetaatge aggatgacga etgteetttg
caqtcactat ccgtggctga gtcgcggttg aagcagggtg ccagcatcct gatccgggct
ttgggcacca atcctaaact gacagegetg gatatcagtg gcaatgccat aggggatget
ggggccaaga tgctagccaa ggctctacgc
330
<210> 1646
<211> 110
<212> PRT
<213> Homo sapiens
<400> 1646
Xaa Asp Leu Ser Asp Asn Gly Phe Gly Ser Asp Met Val Thr Leu Val
                                   10
Leu Ala Ile Gly Arg Ser Arg Ser Leu Lys His Val Ala Leu Gly Arg
```

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25
Asn Phe Asn Val Arg Cys Lys Glu Thr Leu Asp Asp Val Leu His Arg
                            40
Ile Ala Gln Leu Met Gln Asp Asp Cys Pro Leu Gln Ser Leu Ser
Val Ala Glu Ser Arg Leu Lys Gln Gly Ala Ser Ile Leu Ile Arg Ala
                                        75
                    70
Leu Gly Thr Asn Pro Lys Leu Thr Ala Leu Asp Ile Ser Gly Asn Ala
                                   90
               85
Ile Gly Asp Ala Gly Ala Lys Met Leu Ala Lys Ala Leu Arg
                                105
<210> 1647
<211> 501
<212> DNA
<213> Homo sapiens
<400> 1647
aggeogeteg gtgateogeg geggeggeag eggegettee tgetaggace ggeeggggee
gtaceggagg etegggetee acegaceete eteccacece eteccactea cectetggge
cgcgactgcg cagggcgggg ccggccgaac catgggccgc ggtgtgggct aagctggtgg
ccccggcttt agactggacc ccacaatgtt tgcagagatg ttcaggcacg cgggagctga
ttacacacaa tgaatggggg caatgagagc agtggagcag acagagctgg gggccctgtg
gccacatctg tececategg etggcagege tgtgtgcgag agggtgetgt getetacate
agtocaagtg gcacagaget gtetteettg gagcaaacce ggagetacet cetcagegat
gggacctgca agtgcggtct ggagtgtcca cttaatgtcc ccaaggtttt caactttgac
480
cctttggccc cggtgacccc g
501
<210> 1648
<211> 84
<212> PRT
<213> Homo sapiens
<400> 1648
Met Asn Gly Gly Asn Glu Ser Ser Gly Ala Asp Arg Ala Gly Gly Pro
1
                 5
                                    10
Val Ala Thr Ser Val Pro Ile Gly Trp Gln Arg Cys Val Arg Glu Gly
Ala Val Leu Tyr Ile Ser Pro Ser Gly Thr Glu Leu Ser Ser Leu Glu
                            40
Gln Thr Arg Ser Tyr Leu Leu Ser Asp Gly Thr Cys Lys Cys Gly Leu
Glu Cys Pro Leu Asn Val Pro Lys Val Phe Asn Phe Asp Pro Leu Ala
                    70
Pro Val Thr Pro
```

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<210> 1649
<211> 441
<212> DNA
<213> Homo sapiens
<400> 1649
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accaactcac ggttgtcgcg catcttctcc aacaaggtga tccggcgcta tccggccttt
gaagacttcc acgggatgga agaatgcatc gatcagatcg tttcgtattt ccgccacgcc
180
geccaaggee tggaagagaa gaaacagate etttacetge teggeeeegt eggeggeggt
aaatcgtccc tggccgaaaa gctgaaacag ctgatcgaga aggtcccctt ctacgccatc
aagggetege eggtettega gtegeceetg gggttgttea aegecaetga agaeggegeg
atoctogagg aagacttogg gattocaogg ogttacotga acaccatoat gtogocotgg
gcgaccaagc gcctggccga a
441
<210> 1650
<211> 147
<212> PRT
<213> Homo sapiens
<400> 1650
Ala Ser Ala Ala Glu Arg Val Leu Leu Ala Ile Gly Glu Pro Glu Leu
                                   10
                5
1
Leu Asp Thr Ser Thr Asn Ser Arg Leu Ser Arg Ile Phe Ser Asn Lys
                               25
           20
Val Ile Arg Arg Tyr Pro Ala Phe Glu Asp Phe His Gly Met Glu Glu
                           40
Cys Ile Asp Gln Ile Val Ser Tyr Phe Arg His Ala Ala Gln Gly Leu
                                          60
                       55
Glu Glu Lys Lys Gln Ile Leu Tyr Leu Leu Gly Pro Val Gly Gly
                                     75
                   70
Lys Ser Ser Leu Ala Glu Lys Leu Lys Gln Leu Ile Glu Lys Val Pro
                                   90
                                                       95
               85
Phe Tyr Ala Ile Lys Gly Ser Pro Val Phe Glu Ser Pro Leu Gly Leu
                               105
           100
Phe Asn Ala Thr Glu Asp Gly Ala Ile Leu Glu Glu Asp Phe Gly Ile
                                              125
                          120
      115
Pro Arg Arg Tyr Leu Asn Thr Ile Met Ser Pro Trp Ala Thr Lys Arg
                      135
                                           140
Leu Ala Glu
145
<210> 1651
<211> 408
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<212> DNA
<213> Homo sapiens
<400> 1651
neegeggate ceteeggeat ceteggttate geteetega aggaateegg agecegaetg
egeogogage tttccgaacg cetegaggat tacgccgcac aaacttccat ggtgcgttcc
120
gtacactccc tegeattege gttgetgege acageggeeg aggaggaget gegeettatt
accggtgcgg acnaagacgc cgttatccgc gagctgctca cgggccaagc agaagacgga
catggctcgt ggcccgcgga gatgcgcccc gcgtggaatn natgtgggct ttcgcggcag
ctgcgcgatt tccttttgcg ttccattgaa cgcggcctgg gaccgggtga cctagagagc
360
ctcggtgccg agcacggccg ccccatgtgg tctgcggcgg gtgaattc
408
<210> 1652
<211> 136
<212> PRT
<213> Homo sapiens
<400> 1652
Xaa Ala Asp Pro Ser Gly Ile Leu Val Ile Ala Pro Ser Lys Glu Ser
                                10
               5
Gly Ala Arg Leu Arg Arg Glu Leu Ser Glu Arg Leu Glu Asp Tyr Ala
                                                    30
                               25
            20
Ala Gln Thr Ser Met Val Arg Ser Val His Ser Leu Ala Phe Ala Leu
                            40
                                               45
       35
Leu Arg Thr Ala Ala Glu Glu Glu Leu Arg Leu Ile Thr Gly Ala Asp
                                           60
                       55
    50
Xaa Asp Ala Val Ile Arg Glu Leu Leu Thr Gly Gln Ala Glu Asp Gly
                                       75
                    70
His Gly Ser Trp Pro Ala Glu Met Arg Pro Ala Trp Asn Xaa Cys Gly
                                    90
                85
Leu Ser Arg Gln Leu Arg Asp Phe Leu Leu Arg Ser Ile Glu Arg Gly
                             105
Leu Gly Pro Gly Asp Leu Glu Ser Leu Gly Ala Glu His Gly Arg Pro
       115
Met Trp Ser Ala Ala Gly Glu Phe
                       135
<210> 1653
<211> 398
<212> DNA
<213> Homo sapiens
<400> 1653
ccagcetete teegacegeg teettettee ggecataegg caeccaatgt egegteacea
tcacccgcgc acatggccat cgctccaccg gacgagttga gtgacaagat ccggtgcatt
```

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ctgcgcaccc ttgaacctgg tgacagtgtg aaggagattc tcaacacgtc gcgtgtcgtc
ggcattgacg tecagageag cetgettatt getggtgete ageatetgta ettgttggae
240
gattacttcc agcgtccgaa cggtgaaatc gtcaatgtct gggaagctcc gccacacgag
300
cgcgatgcct tgatcgtggc ggccggtgtc gcacaggtgg cacaaagcag cacacccgtg
cagatatggc gctgggaaca gctccgactt tgtctaga
398
<210> 1654
<211> 132
<212> PRT
<213> Homo sapiens
<400> 1654
Pro Ala Ser Leu Arg Pro Arg Pro Ser Ser Gly His Thr Ala Pro Asn
                                    10
Val Ala Ser Pro Ser Pro Ala His Met Ala Ile Ala Pro Pro Asp Glu
            20
Leu Ser Asp Lys Ile Arg Cys Ile Leu Arg Thr Leu Glu Pro Gly Asp
                            40
Ser Val Lys Glu Ile Leu Asn Thr Ser Arg Val Val Gly Ile Asp Val
                                            60
Gln Ser Ser Leu Leu Ile Ala Gly Ala Gln His Leu Tyr Leu Leu Asp
                                        75
                   70
Asp Tyr Phe Gln Arg Pro Asn Gly Glu Ile Val Asn Val Trp Glu Ala
                                    90
                85
Pro Pro His Glu Arg Asp Ala Leu Ile Val Ala Ala Gly Val Ala Gln
                                                    110
            100
                                105
Val Ala Gln Ser Ser Thr Pro Val Gln Ile Trp Arg Trp Glu Gln Leu
                            120
       115
Arg Leu Cys Leu
   130
<210> 1655
<211> 1115
<212> DNA
<213> Homo sapiens
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necetgacet gacetgteet egecatggee gaggeegeet eeggegeegg gggeaegtee
ctggagggcg agcgtggcaa gaggcccccg ccggagggcg agcctgcagc cccggcgtcc
ggagttctgg ataagctttt cggaaagcgg ctcctgcagg ctggtcgcta cctggtgtcc
cacaaggegt ggatgaagae ggtgeetaea gagaaetgeg aegtgetgat gaeetteeea
gacacgaccg atgaccacac gctgctatgg ctgctgaacc acatccgcgt gggcattccc
gageteateg tgeaagteeg ecaceacege cacaegegtg cetaegeett etttgteace
360
```

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gccacgtatg agagcctact ccgaggggcc gacgagctgg gtctgcgcaa agcagtgaag
geogagittg gegggggcae cegeggette teetgegagg aggaetttat etatgagaat
gtggagagcg agctacgctt cttcacctcc caggaacgcc agagcatcat ccgcttctgg
540
ctgcagaatt tgcgtgccaa gcagggagaa gcactccaca acgtgcgctt cctggaggac
cagccaatca tcccggagct ggcagcacgt gggatcatcc agcaggtgtt ccctgtccac
gagcagcgta ttctgaaccg cctcatgaag tcatgggtgc aggccgtgtg tgaaaaccag
cototagatg acatotgtga ttactttggt gtgaaaattg coatgtactt cgcctggctg
ggettetaca egteggetat ggtataceca getgtetteg ggtetgteet gtacacatte
acagaggetg atcagacaag eegggatgtt teetgegtgg tetttgeeet etteaaegtg
atctggtcga cgctgttcct ataggaatgg aagcgtatag gggctgagct gggatataat
tgggggacgc tggactcatc ctgggaagcc gtggaggagc cacgccccca gttcaggtgc
gtgcgacgta tcatccccat cactcgggcc gaggagttct actacccgcc ctggaagcgg
1080
ctgctcttcc agctgcttgt tagcctccgc ctgtg
1115
<210> 1656
<211> 299
<212> PRT
<213> Homo sapiens
<400> 1656
Met Ala Glu Ala Ala Ser Gly Ala Gly Gly Thr Ser Leu Glu Gly Glu
                                    10
Arg Gly Lys Arg Pro Pro Pro Glu Gly Glu Pro Ala Ala Pro Ala Ser
                                25
Gly Val Leu Asp Lys Leu Phe Gly Lys Arg Leu Leu Gln Ala Gly Arg
                            40
Tyr Leu Val Ser His Lys Ala Trp Met Lys Thr Val Pro Thr Glu Asn
                                            60
                        55
Cys Asp Val Leu Met Thr Phe Pro Asp Thr Thr Asp Asp His Thr Leu
                                        75
                    70
65
Leu Trp Leu Leu Asn His Ile Arg Val Gly Ile Pro Glu Leu Ile Val
                                    90
                85
Gln Val Arg His His Arg His Thr Arg Ala Tyr Ala Phe Phe Val Thr
                                                    110
            100
                                105
Ala Thr Tyr Glu Ser Leu Leu Arg Gly Ala Asp Glu Leu Gly Leu Arg
       115
                            120
Lys Ala Val Lys Ala Glu Phe Gly Gly Gly Thr Arg Gly Phe Ser Cys
                                            140
                       135
   130
Glu Glu Asp Phe Ile Tyr Glu Asn Val Glu Ser Glu Leu Arg Phe Phe
                                       155
                   150
Thr Ser Gln Glu Arg Gln Ser Ile Ile Arg Phè Trp Leu Gln Asn Leu
```

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170
               165
Arg Ala Lys Gln Gly Glu Ala Leu His Asn Val Arg Phe Leu Glu Asp
                              185
          180
Gln Pro Ile Ile Pro Glu Leu Ala Ala Arg Gly Ile Ile Gln Gln Val
                          200
                                               205
Phe Pro Val His Glu Gln Arg Ile Leu Asn Arg Leu Met Lys Ser Trp
                       215
Val Gln Ala Val Cys Glu Asn Gln Pro Leu Asp Asp Ile Cys Asp Tyr
                  230
                                      235
Phe Gly Val Lys Ile Ala Met Tyr Phe Ala Trp Leu Gly Phe Tyr Thr
                                 250
              245
Ser Ala Met Val Tyr Pro Ala Val Phe Gly Ser Val Leu Tyr Thr Phe
                              265
                                                 270
Thr Glu Ala Asp Gln Thr Ser Arg Asp Val Ser Cys Val Val Phe Ala
                          280
Leu Phe Asn Val Ile Trp Ser Thr Leu Phe Leu
                       295
   290
<210> 1657
<211> 333
<212> DNA
<213> Homo sapiens
<400> 1657
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gcacggagac gcggcgtcag cacggacagc acgcagtctg tgagcctctg caggcagttc
ttggagcccg cgggcttccc gcgccgcttc agggggcggg cggcagctcg ggccggtact
totoccaaaa ctgctccggg caggggggct ccagcagcct ctgcatgaga cggacggcat
240
ccacgeggcc cgtgtaagtg gcccactect geggegacat tecaeggegg gggtaccete
gcgtggacat ccgcccctgc tagcatcagg gct
<210> 1658
<211> 108
<212> PRT
<213> Homo sapiens
<400> 1658
Met Leu Ala Gly Ala Asp Val His Ala Arg Val Pro Pro Pro Trp Asn
                5
Val Ala Ala Gly Val Gly His Leu His Gly Pro Arg Gly Cys Arg Pro
           20
                               25
Ser His Ala Glu Ala Ala Gly Ala Pro Leu Pro Gly Ala Val Leu Gly
                                               45
Glu Val Pro Ala Arg Ala Ala Arg Pro Leu Lys Arg Arg Gly Lys
                       55
                                           60
Pro Ala Gly Ser Lys Asn Cys Leu Gln Arg Leu Thr Asp Cys Val Leu
Ser Val Leu Thr Pro Arg Leu Arg Ala Gly Pro Gly Gly Arg Gly Arg
```

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90
                                                     95
               85
Pro Gly Pro His Gly Pro Asp Asp Leu Glu Pro Leu
          100
<210> 1659
<211> 382
<212> DNA
<213> Homo sapiens
<400> 1659
nnaagottat ttgttattac taatattttc cgtgaccaga tgggccgcta tggtgagatt
tacacaactt acaagatgat tttggatgct attcgtaagg tgcctactgc cactgttctc
cttaatggag acagtccact tttctacaag ccagctattc caaatcctgt acagtatttt
ggttttgact tggagaaagg cccagcccaa ctggctcact ataataccga aggaattctc
tgtcccgact gccaaggcat cctcaaatat gagcataata cctatgcaaa cttgggcgcc
tatatetgtg aagactgtgg atgtaaacgt cetgateteg actategett gacagaactg
gttgagttaa ccaacaatcg cn
382
<210> 1660
<211> 127
<212> PRT
<213> Homo sapiens
<400> 1660
Xaa Ser Leu Phe Val Ile Thr Asn Ile Phe Arg Asp Gln Met Gly Arg
                   10
1 5
Tyr Gly Glu Ile Tyr Thr Thr Tyr Lys Met Ile Leu Asp Ala Ile Arg
                                                 3.0
Lys Val Pro Thr Ala Thr Val Leu Leu Asn Gly Asp Ser Pro Leu Phe
                         40
Tyr Lys Pro Ala Ile Pro Asn Pro Val Gln Tyr Phe Gly Phe Asp Leu
Glu Lys Gly Pro Ala Gln Leu Ala His Tyr Asn Thr Glu Gly Ile Leu
                                    75
                  70
Cys Pro Asp Cys Gln Gly Ile Leu Lys Tyr Glu His Asn Thr Tyr Ala
                                                  95
                                90
Asn Leu Gly Ala Tyr Ile Cys Glu Asp Cys Gly Cys Lys Arg Pro Asp
 100
                   105
Leu Asp Tyr Arg Leu Thr Glu Leu Val Glu Leu Thr Asn Asn Arg
                          120
<210> 1661
<211> 524
<212> DNA
<213> Homo sapiens
<400> 1661
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1323

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acqcqtcgat gatcatggag aagacgcggg ccggctcctt gcctgtgacc ttcttgtaca
getgegggta gtagagetee aggetetega ggaaggeeae gtageeettg tggeeggtee
120
gctgcaggat gtccaggagc acacccactt tccgtttgcg gatgaccagg ttggggtcgc
tgagcacctg ctcctcatca tcagggttca ggaccttgca ctgccgcagg taaggtgtga
tgcgtgaggg gtcgatgacc gaggtgagcg tcacccggaa gccctccagg acgttccagc
actegicate gitetegiag teegaeatgg ceteageagg caggetgggg agigtgggge
agtgctgaga gcgatgccgg ctcctgcccc cacccgggcc cagctcccac tccttctcag
acgotgggcc agggctotog toagggcato gagggggato agcocaggog catcoaggag
aggtgcccag ctccgtgtcc catcccacgc ttgatcgctg catg
<210> 1662
<211> 174
<212> PRT
<213> Homo sapiens
<400> 1662
Met Gln Arg Ser Ser Val Gly Trp Asp Thr Glu Leu Gly Thr Ser Pro
                                    10
Gly Cys Ala Trp Ala Asp Pro Pro Arg Cys Pro Asp Glu Ser Pro Gly
Pro Ala Ser Glu Lys Glu Trp Glu Leu Gly Pro Gly Gly Gly Arg Ser
                                               45
                           40
       35
Arg His Arg Ser Gln His Cys Pro Thr Leu Pro Ser Leu Pro Ala Glu
                        55
Ala Met Ser Asp Tyr Glu Asn Asp Asp Glu Cys Trp Asn Val Leu Glu
                   70
                                        75
65
Gly Phe Arg Val Thr Leu Thr Ser Val Ile Asp Pro Ser Arg Ile Thr
               85
                                   90
                                                        95
Pro Tyr Leu Arg Gln Cys Lys Val Leu Asn Pro Asp Asp Glu Glu Gln
                                105
                                                   110
           100
Val Leu Ser Asp Pro Asn Leu Val Ile Arg Lys Arg Lys Val Gly Val
       115
                           120
                                                125
Leu Leu Asp Ile Leu Gln Arg Thr Gly His Lys Gly Tyr Val Ala Phe
   130
                       135
                                           140
Leu Glu Ser Leu Glu Leu Tyr Tyr Pro Gln Leu Tyr Lys Lys Val Thr
                                      155
                  150
Gly Lys Glu Pro Ala Arg Val Phe Ser Met Ile Ile Asp Ala
               165
<210> 1663
<211> 321
<212> DNA
<213> Homo sapiens
<400> 1663
```

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nnaqtacttq tcatqattac qcctagtttg ggtatctatt tctctcagcg ttctcagatc
tecegaacee aagacgacga ggeteggaca egegetteta tetegaceet teaagacgag
120
gtcaagaggt ggcacgatcc cgactacgtc cgtgctcagg cgcgctccca gctcggctgg
gtgatgccgg gcgaaactgg gtatcaggtc attggagaaa acggtaaggt cattggatcg
240
acgaettett tggaegaaaa agateeggeg agtgaageea gegetgaege teggtggtgg
caagaggett geggateagt c
321
<210> 1664
<211> 107
<212> PRT
<213> Homo sapiens
<400> 1664
Xaa Val Leu Val Met Ile Thr Pro Ser Leu Gly Ile Tyr Phe Ser Gln
Arg Ser Gln Ile Ser Arg Thr Gln Asp Asp Glu Ala Arg Thr Arg Ala
Ser Ile Ser Thr Leu Gln Asp Glu Val Lys Arg Trp His Asp Pro Asp
                            40
       35
Tyr Val Arg Ala Gln Ala Arg Ser Gln Leu Gly Trp Val Met Pro Gly
                                            60
    50
                        55
Glu Thr Gly Tyr Gln Val Ile Gly Glu Asn Gly Lys Val Ile Gly Ser
                                        75
65
Thr Thr Ser Leu Asp Glu Lys Asp Pro Ala Ser Glu Ala Ser Ala Asp
                85
                                    90
Ala Arg Trp Trp Gln Glu Ala Cys Gly Ser Val
                                105
<210> 1665
<211> 431
<212> DNA
<213> Homo sapiens
<400> 1665
getteegaac teateaagaa geteaagagg tataaaatgg ttttgegete taceggegge
60
ggcccgacta tctccggtgg tgaagtactc atgcaacgcg cttttgcgtg gaacttgctc
atgagtgcta agtcgatggg cattcatacc tgtatcgata cctccggttt tttgggggct
180
geggeaacag atgaettttt agagtetgtt gatttggtgt tgetegaegt caaateggga
gatgaagaaa totacogtgo cotcacoggo agagogttgo aacctaccat cgattttggt
300
gategtetea eegegetegg taaagaaate tggatteggt tegttgtggt eeeeggatae
accgactcgg tagagaacgt ggaaaaggtt gccgatatcg tccgcagatg gcgcaccgct
420
```

```
gtttcacgcg t
431
<210> 1666
<211> 143
<212> PRT
<213> Homo sapiens
<400> 1666
Ala Ser Glu Leu Ile Lys Lys Leu Lys Arg Tyr Lys Met Val Leu Arg
                                  10
Ser Thr Gly Gly Gly Pro Thr Ile Ser Gly Gly Glu Val Leu Met Gln
                                                   30
                              25
           20
Arg Ala Phe Ala Trp Asn Leu Leu Met Ser Ala Lys Ser Met Gly Ile
       35
                           40
                                               45
His Thr Cys Ile Asp Thr Ser Gly Phe Leu Gly Ala Ala Ala Thr Asp
                                          60
                     55
Asp Phe Leu Glu Ser Val Asp Leu Val Leu Leu Asp Val Lys Ser Gly
                                       75
                   70
Asp Glu Glu Ile Tyr Arg Ala Leu Thr Gly Arg Ala Leu Gln Pro Thr
               85
                                   90
Ile Asp Phe Gly Asp Arg Leu Thr Ala Leu Gly Lys Glu Ile Trp Ile
                               105
                                                   110
           100
Arg Phe Val Val Val Pro Gly Tyr Thr Asp Ser Val Glu Asn Val Glu
                                              125
                          120
      115
Lys Val Ala Asp Ile Val Arg Arg Trp Arg Thr Ala Val Ser Arg
                       135
  130
<210> 1667
<211> 370
<212> DNA
<213> Homo sapiens
<400> 1667
tccgctgaga ccagcgttgg tgacttccca ggtgagactg tccgcaccat ggccaagatc
gttgagtcta ctgaggcccg tggcttggac aagatcgcca agatcgactg ggatccgcac
120
accaccagtg gcatcatgtc gaaggcagct gctgagatcg ctgagcgcgc cgaggccaag
tteategtgg cetttaceaa gteeggtgae accgecegte gtategeteg tetgegteeg
ageaccege teategitt caceteigat gagaccaega ccaagaccet egeetgggte
300
tggggcgctc acgccgtcgt taccccggtg tttaagaatg cggaggagct gtaccgctgg
gttaacgcgt
370
<210> 1668
<211> 123
<212> PRT
<213> Homo sapiens
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<400> 1668
Ser Ala Glu Thr Ser Val Gly Asp Phe Pro Gly Glu Thr Val Arg Thr
Met Ala Lys Ile Val Glu Ser Thr Glu Ala Arg Gly Leu Asp Lys Ile
            20
                                25
Ala Lys Ile Asp Trp Asp Pro His Thr Thr Ser Gly Ile Met Ser Lys
                                                45
                            40
Ala Ala Ala Glu Ile Ala Glu Arg Ala Glu Ala Lys Phe Ile Val Ala
                        55
Phe Thr Lys Ser Gly Asp Thr Ala Arg Arg Ile Ala Arg Leu Arg Pro
                    70
                                        75
Ser Thr Pro Leu Ile Val Phe Thr Ser Asp Glu Thr Thr Thr Lys Thr
Leu Ala Trp Val Trp Gly Ala His Ala Val Val Thr Pro Val Phe Lys
            100
                                105
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300
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Ser Ile Cys Ser Thr Pro Gln Pro Leu Ser Arg Ala Gln Val Leu Val
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Ala Glu Gly Lys Ala Val Phe Glu Gly Leu Ser Lys Lys Glu Asp Gly
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Asn Gln Lys Ser Phe Leu Cys Gly Pro His Ser Arg Ser His Phe Gln
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Ala Asn Tyr His Gln Gly Trp Glu Arg Gln Gly Leu Gly Ala Glu Leu
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gcatcccgca tgaagccggt gtcgcgggtc ggggacacga ttttcgctgg cgcctcgtcg
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gttattgcca tagccctggc cgtcatcgtc atcctgatgt tcgtcttcct catgaagacg
240
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Arg Val Gly Asp Thr Ile Phe Ala Gly Ala Ser Ser Val Ile Ala Ile
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Ala Leu Ala Val Ile Val Ile Leu Met Phe Val Phe Leu Met Lys Thr
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Ala Ala Pro Thr Leu Leu Ala Asn Thr Asp Asn Phe Phe Thr Ser Arg
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Ala Trp Thr Thr Asp Gln Asn Pro Pro Ala Phe Gly Ile Gln Ala Leu
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                                                    110
Leu Trp Thr Thr Val Ile Ser Ser Leu Leu Ala Leu Leu Ile Ala Val
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ggeteceage gtetttteca tgagecaaag geetggteet ggaggggggt geeetgeage
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240
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Ser Gln Ile Leu Pro Ser Pro Cys Cys Ile Leu Leu Pro Leu Pro
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Ser Thr Val Glu Val Pro Ala Gly Pro Pro Pro Ala Met Asn Ser Pro
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Gly Arg Arg Pro Ala Glu Leu Gln Gly Thr Pro Leu Gln Asp Gln Ala
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                                            60
Phe Gly Ser Trp Lys Arg Arg Trp Glu Pro Gly Val Thr Glu Gln Thr
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Pro Leu Asp Val Pro Pro Pro Arg Xaa Ser Ala Val Arg Ser Val Thr
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Pro Ser Ala Thr Pro Ser Pro Pro Tyr Leu Pro Thr Pro Val Pro Thr
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Leu Val Pro Met His Ala Pro Met Gln Gln Gln Ala Leu Arg Ser Leu
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Arg Asn Leu Leu Val Glu Asn Ile Ile Asp Ile Tyr Lys Gln Glu Cys
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Ser Ser Arg Pro Leu Gln Lys Gly Ser His Pro Met Tyr Lys Glu His
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                               105
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Cys Ser Met Cys Lys Val Phe Gly Ile His Lys Ala Cys Glu Val
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Lys His Gly Asp Lys Lys Phe Ala Cys Glu Val Cys Ser Lys Met Phe
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                           40
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Tyr Arg Lys Asp Val Met Leu Asp His Gln Arg Arg His Xaa Gly Arg
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Ser Ala Ala Ser Glu Ala Xaa Glu Asp Leu Glu Ala Gly Gly Glu Asn
                  70
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Leu Val Arg Tyr Lys Lys Glu Pro Ser Gly Cys Pro Val Cys Gly Lys
                                   90
                                                       95
               85
Val Phe Ser Cys Arg Ser Asn Met Asn Lys His Leu Leu Thr His Gly
                            105
          100
Asp Lys Lys Tyr Thr Cys Glu Ile Cys Gly Arg Lys Phe Phe Arg Val
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                                               125
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Asp Val Leu Arg
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110

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2280			cttattctca		
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2520		_	atcttaccaa		
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Ile Val Glu Leu Glu Val Glu Asn Arg Gly Leu Lys Ala Glu Leu Asp
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Glu Gln Lys Asn Ser Ala Gly Ser Trp Ala Ser Pro Arg Thr Pro Ala
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Thr Phe Pro Ala Gly Leu Thr Ala Ala Ala Val Arg Ser Gln Ala Asn
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Ala Phe Ser Gln Ser Ile Lys Pro Lys Gln Thr Thr Ser Leu Tyr Ile
       35
                            40
Arg Gln Ile Met Trp Tyr Gln Asn Phe Pro Val Trp Arg Thr Ile Leu
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Trp Pro Gly Lys Gly Ser Val Phe Ser Val Arg Val Pro Leu Ala Arg
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Thr Gln Val Ser Ala Pro Ala Lys Pro Ala Gln Glu Ser Gly Gln Pro
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Asp		Gly	Asp	Tyr	Gln		Gly	Tyr	Tyr	Ser		GIn	Thr	Thr	GIU
	370					375					380				_
Gly	Glu	Gln	Ile	Ala	Gln	Leu	Ile	Ala	Gly		He	Asp	Ile	Ile	Leu
385					390				_	395			_		400
Lys	Lys	Lys	Lys	Ser	Lys	Asp	His	Phe		Leu	GIu	GIY	Asp		GIu
				405					410	_				415	_
Ser	Thr	Met		Glu	Asp	Ser	Val		Pro	Lys	Lys	Ser		Val	Leu
			420				_	425			•		430		
Gln	Gln		Tyr	Asn	Arg	Val		Lys	Val	Glu	His		Ser	val	Ala
		435					440		_		_	445	_		~-
Leu		Ala	Ile	Met	Arg		Gly	Ala	Ser	Gly		GIu	Asn	Phe	GIn
	450					455	_				460	_			
Val	Gly	Ser	Met	Pro		Ala	Gln	Gln	Gln		Thr	Ser	Gly	GIn	
465					470		_		_	475		~1			480
His	Arg	Gly	His	Met	Pro	Pro	Leu	Thr		Ala	Gln	Gln	Ala		Thr
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Gly	Thr	Ile		Ser	Ser	Met	GIn		Val	Gin	АТА	АТа		Ата	Thr
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Leu	Asp		Phe	Asp	Thr	Leu		Pro	Leu	GIA	GIN		ALA	Ата	ser
		515	_	_	_	_	520	_	~1	.	.	525	~1	~1 -	***
Lys		Trp	Arg	Lys	Asn		Met	Asp	GIu	Ser		HIS	GIU	11e	HIS
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	Leu			Leu			Asp	585				Gly	590		
T 0		595	Ala		Leu	Glu	Asp 600	585 Glu	Gly	Gly	Ser	Gly 605	590 Arg	Pro	Leu
Leu	Gln	595	Ala	Leu Lys	Leu	Glu Leu	Asp 600	585 Glu	Gly	Gly	Ser Ser	Gly 605	590 Arg	Pro	Leu
	Gln 610	595 Ala	Ala Ala	Lys	Leu Gly	Glu Leu 615	Asp 600 Ala	585 Glu Gly	Gly Ala	Gly Val	Ser Ser 620	Gly 605 Glu	590 Arg Leu	Pro Leu	Leu Arg
Ser	Gln 610	595 Ala	Ala Ala		Leu Gly Ser	Glu Leu 615	Asp 600 Ala	585 Glu Gly	Gly Ala	Gly Val Gln	Ser Ser 620	Gly 605 Glu	590 Arg Leu	Pro Leu	Leu Arg Ala
Ser 625	Gln 610 Ala	595 Ala Gln	Ala Ala Pro	Lys Ala	Leu Gly Ser 630	Glu Leu 615 Ala	Asp 600 Ala Glu	585 Glu Gly Pro	Gly Ala Arg	Gly Val Gln 635	Ser Ser 620 Asn	Gly 605 Glu Leu	590 Arg Leu Leu	Pro Leu Gln	Leu Arg Ala 640
Ser 625	Gln 610 Ala	595 Ala Gln	Ala Ala Pro	Lys Ala Gly	Leu Gly Ser 630	Glu Leu 615 Ala	Asp 600 Ala Glu	585 Glu Gly Pro	Gly Ala Arg Glu	Gly Val Gln 635	Ser Ser 620 Asn	Gly 605 Glu Leu	590 Arg Leu Leu	Pro Leu Gln Ile	Leu Arg Ala 640
Ser 625 Ala	Gln 610 Ala Gly	595 Ala Gln Asn	Ala Ala Pro Val	Lys Ala Gly 645	Leu Gly Ser 630 Gln	Glu Leu 615 Ala Ala	Asp 600 Ala Glu Ser	585 Glu Gly Pro Gly	Gly Ala Arg Glu 650	Gly Val Gln 635 Leu	Ser Ser 620 Asn Leu	Gly 605 Glu Leu Gln	590 Arg Leu Leu Gln	Pro Leu Gln Ile 655	Leu Arg Ala 640 Gly
Ser 625 Ala	Gln 610 Ala Gly	595 Ala Gln Asn Asp	Ala Ala Pro Val Thr	Lys Ala Gly 645 Asp	Leu Gly Ser 630 Gln Pro	Glu Leu 615 Ala Ala His	Asp 600 Ala Glu Ser	585 Glu Gly Pro Gly Gln	Gly Ala Arg Glu 650 Asp	Gly Val Gln 635 Leu Ala	Ser Ser 620 Asn Leu Leu	Gly 605 Glu Leu Gln Met	590 Arg Leu Leu Gln Gln	Pro Leu Gln Ile 655	Leu Arg Ala 640 Gly
Ser 625 Ala Glu	Gln 610 Ala Gly Ser	595 Ala Gln Asn Asp	Ala Ala Pro Val Thr 660	Lys Ala Gly 645 Asp	Leu Gly Ser 630 Gln Pro	Glu Leu 615 Ala Ala His	Asp 600 Ala Glu Ser	585 Glu Gly Pro Gly Gln 665	Gly Ala Arg Glu 650 Asp	Gly Val Gln 635 Leu Ala	Ser Ser 620 Asn Leu Leu	Gly 605 Glu Leu Gln Met	590 Arg Leu Leu Gln Gln 670	Pro Leu Gln Ile 655 Leu	Leu Arg Ala 640 Gly Ala
Ser 625 Ala Glu	Gln 610 Ala Gly Ser	595 Ala Gln Asn Asp Val	Ala Ala Pro Val Thr 660	Lys Ala Gly 645 Asp	Leu Gly Ser 630 Gln Pro	Glu Leu 615 Ala Ala His	Asp 600 Ala Glu Ser Phe	585 Glu Gly Pro Gly Gln 665	Gly Ala Arg Glu 650 Asp	Gly Val Gln 635 Leu Ala	Ser Ser 620 Asn Leu Leu	Gly 605 Glu Leu Gln Met	590 Arg Leu Leu Gln Gln 670	Pro Leu Gln Ile 655 Leu	Leu Arg Ala 640 Gly Ala
Ser 625 Ala Glu Lys	Gln 610 Ala Gly Ser Ala	595 Ala Gln Asn Asp Val 675	Ala Pro Val Thr 660 Ala	Lys Ala Gly 645 Asp	Leu Gly Ser 630 Gln Pro	Glu Leu 615 Ala Ala His	Asp 600 Ala Glu Ser Phe Ala 680	S85 Glu Gly Pro Gly Gln 665 Ala	Gly Ala Arg Glu 650 Asp	Gly Val Gln 635 Leu Ala Val	Ser Ser 620 Asn Leu Leu Leu	Gly 605 Glu Leu Gln Met Lys 685	590 Arg Leu Leu Gln Gln 670 Ala	Pro Leu Gln Ile 655 Leu Lys	Leu Arg Ala 640 Gly Ala Ser
Ser 625 Ala Glu Lys	Gln 610 Ala Gly Ser Ala Ala	595 Ala Gln Asn Asp Val 675	Ala Pro Val Thr 660 Ala	Lys Ala Gly 645 Asp	Leu Gly Ser 630 Gln Pro	Glu Leu 615 Ala Ala His Ala Asp	Asp 600 Ala Glu Ser Phe Ala 680	S85 Glu Gly Pro Gly Gln 665 Ala	Gly Ala Arg Glu 650 Asp	Gly Val Gln 635 Leu Ala Val	Ser Ser 620 Asn Leu Leu Leu	Gly 605 Glu Leu Gln Met Lys 685	590 Arg Leu Leu Gln Gln 670 Ala	Pro Leu Gln Ile 655 Leu Lys	Leu Arg Ala 640 Gly Ala Ser
Ser 625 Ala Glu Lys Val	Gln 610 Ala Gly Ser Ala Ala 690	595 Ala Gln Asn Asp Val 675 Gln	Ala Pro Val Thr 660 Ala	Lys Ala Gly 645 Asp Ser	Leu Gly Ser 630 Gln Pro Ala Glu	Glu Leu 615 Ala Ala His Ala Asp 695	Asp 600 Ala Glu Ser Phe Ala 680 Ser	S85 Glu Gly Pro Gly Gln 665 Ala	Gly Ala Arg Glu 650 Asp Leu Leu	Gly Val Gln 635 Leu Ala Val	Ser Ser 620 Asn Leu Leu Leu Thr 700	Gly 605 Glu Leu Gln Met Lys 685 Gln	590 Arg Leu Leu Gln 670 Ala Val	Pro Leu Gln Ile 655 Leu Lys Ile	Leu Arg Ala 640 Gly Ala Ser
Ser 625 Ala Glu Lys Val	Gln 610 Ala Gly Ser Ala Ala 690	595 Ala Gln Asn Asp Val 675 Gln	Ala Pro Val Thr 660 Ala	Lys Ala Gly 645 Asp	Leu Gly Ser 630 Gln Pro Ala Glu Ala	Glu Leu 615 Ala Ala His Ala Asp 695	Asp 600 Ala Glu Ser Phe Ala 680 Ser	S85 Glu Gly Pro Gly Gln 665 Ala	Gly Ala Arg Glu 650 Asp Leu Leu	Gly Val Gln 635 Leu Ala Val Gln Gln	Ser Ser 620 Asn Leu Leu Leu Thr 700	Gly 605 Glu Leu Gln Met Lys 685 Gln	590 Arg Leu Leu Gln 670 Ala Val	Pro Leu Gln Ile 655 Leu Lys Ile	Leu Arg Ala 640 Gly Ala Ser
Ser 625 Ala Glu Lys Val Ala 705	Gln 610 Ala Gly Ser Ala Ala 690 Ala	595 Ala Gln Asn Asp Val 675 Gln Thr	Ala Ala Pro Val Thr 660 Ala Arg Gln	Lys Ala Gly 645 Asp Ser Thr	Leu Gly Ser 630 Gln Pro Ala Glu Ala 710	Glu Leu 615 Ala Ala His Ala Asp 695 Leu	Asp 600 Ala Glu Ser Phe Ala 680 Ser	585 Glu Gly Pro Gly Gln 665 Ala Gly Thr	Gly Ala Arg Glu 650 Asp Leu Leu Ser	Gly Val Gln 635 Leu Ala Val Gln Gln 715	Ser Ser 620 Asn Leu Leu Leu Thr 700 Leu	Gly 605 Glu Leu Gln Met Lys 685 Gln Val	590 Arg Leu Leu Gln 670 Ala Val	Pro Leu Gln Ile 655 Leu Lys Ile Cys	Leu Arg Ala 640 Gly Ala Ser Ala Thr 720
Ser 625 Ala Glu Lys Val Ala 705	Gln 610 Ala Gly Ser Ala Ala 690 Ala	595 Ala Gln Asn Asp Val 675 Gln Thr	Ala Ala Pro Val Thr 660 Ala Arg Gln	Lys Ala Gly 645 Asp Ser Thr Cys	Leu Gly Ser 630 Gln Pro Ala Glu Ala 710	Glu Leu 615 Ala Ala His Ala Asp 695 Leu	Asp 600 Ala Glu Ser Phe Ala 680 Ser	585 Glu Gly Pro Gly Gln 665 Ala Gly Thr	Gly Ala Arg Glu 650 Asp Leu Leu Ser	Gly Val Gln 635 Leu Ala Val Gln Gln 715	Ser Ser 620 Asn Leu Leu Leu Thr 700 Leu	Gly 605 Glu Leu Gln Met Lys 685 Gln Val	590 Arg Leu Leu Gln 670 Ala Val	Pro Leu Gln Ile 655 Leu Lys Ile Cys	Leu Arg Ala 640 Gly Ala Ser Ala Thr 720
Ser 625 Ala Glu Lys Val Ala 705 Lys	Gln 610 Ala Gly Ser Ala Ala 690 Ala	595 Ala Gln Asn Asp Val 675 Gln Thr	Ala Ala Pro Val Thr 660 Ala Arg Gln Ala	Lys Ala Gly 645 Asp Ser Thr	Leu Gly Ser 630 Gln Pro Ala Glu Ala 710 Thr	Glu Leu 615 Ala Ala His Ala Asp 695 Leu Ile	Asp 600 Ala Glu Ser Phe Ala 680 Ser Ser	585 Glu Gly Pro Gly Gln 665 Ala Gly Thr	Gly Ala Arg Glu 650 Asp Leu Leu Ser Pro 730	Gly Val Gln 635 Leu Ala Val Gln Gln 715 Val	Ser Ser 620 Asn Leu Leu Thr 700 Leu Cys	Gly 605 Glu Leu Gln Met Lys 685 Gln Val	590 Arg Leu Leu Gln 670 Ala Val Ala Glu	Pro Leu Gln Ile 655 Leu Lys Ile Cys Gln 735	Leu Arg Ala 640 Gly Ala Ser Ala Thr 720 Leu

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Ala Ser		Ala	Ala	Thr	Glu		GIY	GIn	Leu	Leu		GIA	vaı	GIY
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Ala IIII	ASP	1111	805	Deu	1111	142	****	810					815	
Gly Asp	Ala	Glv		Met	Val	Arg	Gln		Arg	Ile	Leu	Ala		Ala
ory hop	7.1.4	820				**** 5	825		5			830		
Thr Ser	Asp		Val	Asn	Ala	Ile	Lys	Ala	Asp	Ala	Glu	Gly	Glu	Ser
	835					840	•		-		845	=		
Asp Leu	Glu	Asn	Ser	Arg	Lys	Leu	Leu	Ser	Ala	Ala	Lys	Ile	Leu	Ala
850					855					860			•	
Asp Ala	Thr	Ala	Lys	Met	Val	Glu	Ala	Ala	Lys	Gly	Ala	Ala	Ala	His
865				870					875					880
Pro Asp	Ser	Glu	Glu	Gln	Gln	Gln	Arg	Leu	Arg	Glu	Ala	Ala		Gly
			885			_	_	890		_		_	895	_
Leu Arg	Met		Thr	Asn	Ala	Ala		Gln	Asn	Ala	Ile		Lys	Lys
		900	_	~1			905		a1			910	C	21.
Leu Val		Arg	Leu	GIU	HIS		АТА	Lys	GIn	Ala	925	Ala	ser	ALA
Thr Gln	915	T10	717	חות	71 -	920	wic	A 1 -	λla	car		Dro	Lve	αla
930	1111	116	AId	Ald	935	GIII	піз	AIA	ніа	940	AIG	FIO	Буз	ALG
Ser Ala	Glv	Pro	Gln	Pro		Leu	Val	Gln	Ser		Lvs	Ala	Val	Ala
945	Q1,	110	01	950	200	200			955	-1-	-1-			960
Glu Gln	Ile	Pro	Leu		Val	Gln	Gly	Val	Arg	Gly	Ser	Gln	Ala	Gln
			965				-	970	_				975	
Pro Asp	Ser	Pro	Ser	Ala	Gln	Leu	Ala	Leu	Ile	Ala	Ala	Ser	Gln	Ser
		980					985					990		
Phe Leu	Gln	Pro	Gly	Gly	Lys	Met	Val	Ala	Ala	Ala	Lys	Ala	Ser	Val
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Pro Thr		Gln	Asp	Gln			Ala	Met	Gln			Gln	Cys	Ala
1010			m)		1015		01	T	B	1020		7 J -	01-	T
Lys Asn	Leu	GIĀ	Thr			ALA	GIU	Leu	1035		ALA	Ala	GIII	1040
1025 Ala Gln	C1	ת ו ת	Cvc	1030		T Ann	Clu	Mot			λla	T.en	Ser	
Ala Gin	GIU	Ala	1045		FIO	Leu	GIU	1050		361	ALG	Dea	1055	
Val Gln	Asn	Leu			Asp	Leu	Gln			Lys	Ala	Ala		
		1060					1065			•		1070		•
Asp Gly	Lys	Leu	Lys	Pro	Leu	Pro	Gly	Glu	Thr	Met	Glu	Lys	Cys	Thr
	1075		=			1080					1085			
Gln Asp	Leu	Gly	Asn	Ser	Thr	Lys	Ala	Val	Ser	Ser	Ala	Ile	Ala	Gln
109														
Leu Leu	Gly	Glu	Val	Ala	Gln	Gly	Asn	Glu	Asn	Tyr	Ala	Gly	Ile	
1105				1110					1115				_	1120
Ala Arg	Asp	Val			Gly	Leu	Arg			Ala	Gln	Ala		
			1125		_	_	_	1130				-1	1139	
Gly Val	Ala			Thr	Ser	Asp			Val	GIn	Ala			ьeu
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Asp Thr	Ala 1159		Asp	vaı	Leu	Asp		A14	ser	ser	1165		GIL	GIU
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ser Cys	Leu	Pro			Arg	ASP	val			ATG	rea	Arg		
	_		1209		_	_	_	1210		_	_	_	121	
Gly Asp	Ala	Ser	Lys	Arg	Leu	Leu			Ser	Leu	Pro			Thr
		1220					122					1230		
Gly Thr	Phe	Gln	Glu	Ala	Gln	Ser	Arg	Leu	Asn	Glu	Ala	Ala	Ala	Gly
	1235					124					124			
Leu Asn	Gln	Ala	Ala	Thr	Glu	Leu	Val	Gln	Ala	Ser	Arg	Gly	Thr	Pro
1250					1259					1260				
Gln Asp		Ala	Ara	Ala	Ser	Glv	Ara	Phe	Glv	Gln	Asp	Phe	Ser	Thr
1265			5	1270					1275		-			1280
Phe Leu	Clu	λ 1 ο	Clv			Mor	Δla	Gly			Pro	Ser	Gln	
riie neu	Gru	ALG	1285		014	1100	71.4	1290					1299	
Asp Arg		63 -				N	T			т1 о	Ca=	Mor		
Asp Arg	Ald			vai	Ser	ASII			Gry	116	261			SCI
	_	1300				_	130					131(
Ser Lys			Leu	Ala				Leu	Ser	Thr			Ala	Ala
	1319					1320					1325			
Pro Asn	Leu	Lys	Ser	Gln	Leu	Ala	Ala	Ala	Ala			Val	Thr	Asp
1330					1335					1340				
Ser Ile	Asn	Gln	Leu	Ile	Thr	Met	Cys	Thr	Gln	Gln	Ala	Pro	Gly	Gln
1345				1350)				1355	5				1360
Lys Glu	Cys	Asp	Asn	Ala	Leu	Arg	Glu	Leu	Glu	Thr	Val	Arg	Glu	Leu
•	•	-	1365					1370					1379	
Leu Glu	Asn	Pro	Val	Gln	Pro	Ile	Asn	Asp	Met	Ser	Tyr	Phe	Gly	Cys
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Leu Asn	Ser	1380 Val		Glu	Asn	Ser			Leu	Glv	Glu			Thr
Leu Asp		Val		Glu			Lys		Leu	Gly		Ala		Thr
	1399	Val	Met			1400	Lys)	Val			1405	Ala	Met	
Gly Ile	1399 Ser	Val	Met		Lys	1400 Asn	Lys)	Val		Pro	1405 Glu	Ala	Met	
Gly Ile	1399 Ser	Val Gln	Met Asn	Ala	Lys 1415	1400 Asn	Lys O Gly	Val Asn	Leu	Pro 1420	1405 Glu)	Ala 5 Phe	Met	Asp
Gly Ile 1410 Ala Ile	1399 Ser	Val Gln	Met Asn	Ala Ser	Lys 1415 Lys	1400 Asn	Lys O Gly	Val Asn Cys	Leu Gly	Pro 1420 Phe	1405 Glu)	Ala 5 Phe	Met	Asp Ala
Gly Ile 1410 Ala Ile 1425	1399 Ser Ser	Val Gln Thr	Met Asn Ala	Ala Ser 1430	Lys 1415 Lys	1400 Asn S Ala	Lys O Gly Leu	Val Asn Cys	Leu Gly 1435	Pro 1420 Phe	1409 Glu) Thr	Ala Phe Glu	Met Gly Ala	Asp Ala 1440
Gly Ile 1410 Ala Ile	1399 Ser Ser	Val Gln Thr	Met Asn Ala Tyr	Ala Ser 1430 Leu	Lys 1415 Lys	1400 Asn S Ala	Lys O Gly Leu	Val Asn Cys Ser	Leu Gly 1435 Asp	Pro 1420 Phe	1409 Glu) Thr	Ala Phe Glu	Met Gly Ala Gln	Asp Ala 1440 Ala
Gly Ile 1410 Ala Ile 1425 Ala Gln	1399 Ser Ser Ala	Val Gln Thr	Met Asn Ala Tyr 1445	Ala Ser 1430 Leu	Lys 1419 Lys) Val	1400 Asn Ala Gly	Lys O Gly Leu Val	Val Asn Cys Ser 1450	Leu Gly 1435 Asp	Pro 1420 Phe Pro	1409 Glu Thr Asn	Ala Phe Glu Ser	Met Gly Ala Gln 1455	Asp Ala 1440 Ala
Gly Ile 1410 Ala Ile 1425	1399 Ser Ser Ala	Val Gln Thr Ala	Met Asn Ala Tyr 1445 Leu	Ala Ser 1430 Leu	Lys 1419 Lys) Val	1400 Asn Ala Gly	Lys O Gly Leu Val	Val Asn Cys Ser 1450 Gln	Leu Gly 1435 Asp	Pro 1420 Phe Pro	1409 Glu Thr Asn	Ala Phe Glu Ser	Met Gly Ala Gln 1455 Asn	Asp Ala 1440 Ala
Gly Ile 1410 Ala Ile 1425 Ala Gln Gly Gln	1399 Ser Ser Ala Gln	Val Gln Thr Ala Gly 1460	Met Asn Ala Tyr 1445 Leu	Ser 1430 Leu Val	Lys 1419 Lys) Val Glu	1400 Asn Ala Gly Pro	Lys O Gly Leu Val Thr 1465	Val Asn Cys Ser 1450 Gln	Leu Gly 1435 Asp) Phe	Pro 1420 Phe Pro	1405 Glu Thr Asn	Ala Phe Glu Ser Ala 1470	Gly Ala Gln 1455 Asn	Asp Ala 1440 Ala Gln
Gly Ile 1410 Ala Ile 1425 Ala Gln	1399 Ser Ser Ala Gln	Val Gln Thr Ala Gly 1460	Met Asn Ala Tyr 1445 Leu	Ser 1430 Leu Val	Lys 1419 Lys) Val Glu	1400 Asn Ala Gly Pro	Lys Gly Leu Val Thr 1465	Val Asn Cys Ser 1450 Gln Gly	Leu Gly 1435 Asp) Phe	Pro 1420 Phe Pro	1405 Glu Thr Asn Arg	Ala Phe Glu Ser Ala 1470 Cys	Gly Ala Gln 1455 Asn	Asp Ala 1440 Ala Gln
Gly Ile 1410 Ala Ile 1425 Ala Gln Gly Gln Ala Ile	Ser Ser Ala Gln Gln 1475	Val Gln Thr Ala Gly 1460 Met	Met Asn Ala Tyr 1445 Leu Ala	Ser 1430 Leu Val Cys	Lys 1419 Lys Val Glu	Ala Gly Pro Ser 1480	Lys Gly Leu Val Thr 1465 Leu	Val Asn Cys Ser 1450 Gln Gly	Gly 1435 Asp) Phe Glu	Pro 1420 Phe Pro Ala Pro	1409 Glu Thr Asn Arg Gly 1488	Ala Phe Glu Ser Ala 1470 Cys	Met Gly Ala Gln 1455 Asn Thr	Asp Ala 1440 Ala Gln Gln
Gly Ile 1410 Ala Ile 1425 Ala Gln Gly Gln	Ser Ser Ala Gln Gln 1475	Val Gln Thr Ala Gly 1460 Met	Met Asn Ala Tyr 1445 Leu Ala	Ser 1430 Leu Val Cys	Lys 1419 Lys Val Glu	Ala Gly Pro Ser 1480	Lys Gly Leu Val Thr 1465 Leu	Val Asn Cys Ser 1450 Gln Gly	Gly 1435 Asp) Phe Glu	Pro 1420 Phe Pro Ala Pro	1409 Glu Thr Asn Arg Gly 1488	Ala Phe Glu Ser Ala 1470 Cys	Met Gly Ala Gln 1455 Asn Thr	Asp Ala 1440 Ala Gln Gln
Gly Ile 1410 Ala Ile 1425 Ala Gln Gly Gln Ala Ile Ala Gln 1490	Ser Ala Gln 1475 Val	Val Gln Thr Ala Gly 1460 Met	Met Asn Ala Tyr 1445 Leu Ala Ser	Ser 1430 Leu Val Cys	Lys 1419 Lys Val Glu Gln Ala 1495	Ala Gly Pro Ser 1480 Thr	Lys Gly Leu Val Thr 1465 Leu Ile	Val Asn Cys Ser 1450 Gln Gly Val	Leu Gly 1435 Asp) Phe Glu Ala	Pro 1420 Phe Pro Ala Pro Lys 1500	1405 Glu Thr Asn Arg Gly 1485 His	Ala Phe Glu Ser Ala 1470 Cys Thr	Met Gly Ala Gln 1455 Asn Thr	Asp Ala 1440 Ala Gln Gln Ala
Gly Ile 1410 Ala Ile 1425 Ala Gln Gly Gln Ala Ile Ala Gln 1490	Ser Ala Gln 1475 Val	Val Gln Thr Ala Gly 1460 Met	Met Asn Ala Tyr 1445 Leu Ala Ser	Ser 1430 Leu Val Cys	Lys 1419 Lys Val Glu Gln Ala 1495	Ala Gly Pro Ser 1480 Thr	Lys Gly Leu Val Thr 1465 Leu Ile	Val Asn Cys Ser 1450 Gln Gly Val	Leu Gly 1435 Asp) Phe Glu Ala	Pro 1420 Phe Pro Ala Pro Lys 1500	1405 Glu Thr Asn Arg Gly 1485 His	Ala Phe Glu Ser Ala 1470 Cys Thr	Met Gly Ala Gln 1455 Asn Thr	Asp Ala 1440 Ala Gln Gln Ala
Gly Ile 1410 Ala Ile 1425 Ala Gln Gly Gln Ala Ile Ala Gln 1490 Leu Cys	Ser Ala Gln 1475 Val	Val Gln Thr Ala Gly 1460 Met	Met Asn Ala Tyr 1445 Leu Ala Ser	Ser 1430 Leu Val Cys	Lys 1415 Lys Val Glu Gln Ala 1495 Leu	Ala Gly Pro Ser 1480 Thr	Lys Gly Leu Val Thr 1465 Leu Ile	Val Asn Cys Ser 1450 Gln Gly Val	Leu Gly 1435 Asp) Phe Glu Ala	Pro 1420 Phe Pro Ala Pro Lys 1500 Thr	1405 Glu Thr Asn Arg Gly 1485 His	Ala Phe Glu Ser Ala 1470 Cys Thr	Met Gly Ala Gln 1455 Asn Thr	Asp Ala 1440 Ala Gln Gln Ala
Gly Ile 1410 Ala Ile 1425 Ala Gln Gly Gln Ala Ile Ala Gln 1490 Leu Cys 1505	Ser Ser Ala Gln Gln 1475 Val	Val Gln Thr Ala Gly 1460 Met Leu Ser	Met Asn Ala Tyr 1445 Leu Ala Ser Cys	Ser 1430 Leu Val Cys Ala Arg	Lys 1415 Lys Val Glu Gln Ala 1495 Leu	Ala Gly Pro Ser 1480 Thr Ala	Lys Gly Leu Val Thr 1465 Leu Ile	Asn Cys Ser 1450 Gln Gly Val	Gly 1435 Asp Phe Glu Ala Arg	Pro 1420 Phe Pro Ala Pro Lys 1500 Thr	1405 Glu Thr Asn Arg Gly 1485 His	Ala Phe Glu Ser Ala 1470 Cys Thr	Met Gly Ala Gln 1455 Asn Thr Ser	Asp Ala 1440 Ala Gln Gln Ala Thr 1520
Gly Ile 1410 Ala Ile 1425 Ala Gln Gly Gln Ala Ile Ala Gln 1490 Leu Cys	1399 Ser Ser Ala Gln Gln 1475 Val Asn	Val Gln Thr Ala Gly 1460 Met Leu Ser	Met Asn Ala Tyr 1445 Leu Ala Ser Cys Phe	Ser 1430 Leu Val Cys Ala Arg 1510 Val	Lys 1419 Lys Val Glu Gln Ala 1499 Leu Gln	Ala Gly Pro Ser 1480 Thr Ala Ser	Lys Gly Leu Val Thr 1465 Leu Ile Ser	Val Asn Cys Ser 1450 Gln Gly Val Ala Lys	Gly 1435 Asp Phe Glu Ala Arg 1515 Glu	Pro 1420 Phe Pro Ala Pro Lys 1500 Thr	1405 Glu Thr Asn Arg Gly 1485 His Thr	Ala Phe Glu Ser Ala 1470 Cys Thr Asn	Met Gly Ala Gln 1455 Asn Thr Ser Pro	Asp Ala 1440 Ala Gln Gln Ala Thr 1520 Thr
Gly Ile 1410 Ala Ile 1425 Ala Gln Gly Gln Ala Ile Ala Gln 1490 Leu Cys 1505 Ala Lys	Ser Ala Gln 1475 Val Asn Arg	Val Gln Thr Ala Gly 1460 Met Leu Ser	Met Asn Ala Tyr 1445 Leu Ala Ser Cys Phe 1525	Ser 1430 Leu Val Cys Ala Arg 1510 Val	Lys 1419 Lys Val Glu Gln Ala 1499 Leu	Ala Gly Pro Ser 1480 Thr Ala Ser	Lys Gly Leu Val Thr 1465 Leu Ile Ser Ala	Val Asn Cys Ser 1450 Gln Gly Val Ala Lys 1530	Gly 1435 Asp Phe Glu Ala Arg 1515 Glu	Pro 1420 Phe Pro Ala Pro Lys 1500 Thr	1405 Glu Thr Asn Arg Gly 1485 His Thr	Ala Phe Glu Ser Ala 1470 Cys Thr Asn	Met Gly Ala Gln 1455 Asn Thr Fro Ser 1535	Asp Ala 1440 Ala 6 Gln Gln Ala Thr 1520 Thr
Gly Ile 1410 Ala Ile 1425 Ala Gln Gly Gln Ala Ile Ala Gln 1490 Leu Cys 1505	Ser Ala Gln 1475 Val Asn Arg	Val Gln Thr Ala Gly 1460 Met Leu Ser Gln Val	Met Asn Ala Tyr 1445 Leu Ala Ser Cys Phe 1525 Lys	Ser 1430 Leu Val Cys Ala Arg 1510 Val	Lys 1419 Lys Val Glu Gln Ala 1499 Leu	Ala Gly Pro Ser 1480 Thr Ala Ser	Lys Gly Leu Val Thr 1465 Leu Ile Ser Ala	Val Asn Cys Ser 1450 Gln Gly Val Ala Lys 1530 Leu	Gly 1435 Asp Phe Glu Ala Arg 1515 Glu	Pro 1420 Phe Pro Ala Pro Lys 1500 Thr	1405 Glu Thr Asn Arg Gly 1485 His Thr	Ala Phe Glu Ser Ala 1470 Cys Thr Asn Asn	Met Gly Ala Gln 1455 Asn Thr Ser Pro Ser 1535 Thr	Asp Ala 1440 Ala 6 Gln Gln Ala Thr 1520 Thr
Gly Ile 1410 Ala Ile 1425 Ala Gln Gly Gln Ala Ile Ala Gln 1490 Leu Cys 1505 Ala Lys Ala Asn	Ser Ala Gln 1475 Val Asn Arg Leu	Val Gln Thr Ala Gly 1460 Met Ser Gln Val	Met Asn Ala Tyr 1445 Leu Ala Ser Cys Phe 1525 Lys	Ala Ser 1430 Leu Val Cys Ala Arg 1510 Val	Lys 1419 Lys Val Glu Gln Ala 1495 Leu Gln	1400 Asn Ala Gly Pro Ser 1480 Thr Ala Ser Lys	Lys O Gly Leu Val Thr 1465 Leu O Ile Ser Ala 1545	Val Asn Cys Ser 1450 Gln Gly Val Ala Lys 1530 Leu	Gly 1435 Asp Phe Glu Ala Arg 1515 Glu Asp	Pro 1420 Phe Pro Ala Pro Lys 1500 Thr Val	1409 Glu Thr Asn Arg Gly 1485 His Thr Ala	Ala Phe Glu Ser Ala 1470 Cys Thr Asn Asn Phe 1550	Met Gly Ala Gln 1455 Asn Thr Ser Pro Ser 1535 Thr	Asp Ala 1440 Ala Gln Gln Ala Thr 1520 Thr Glu
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Leu Thr 1890 Val Ala 1905 Gln Glu Leu Gln	Ser F 1875 Ser F Ala C Leu C Cys S	L860 Asp T Glu F Gly F Ger F L940 Arg V	Thr S Tyr (Asn (His (1925) Pro S	Lys Ser Gly Gly Ser Ser	Pro Arg 1895 Glu Cys Asp Glu	Glu 1880 Leu Ile Ala Ala	1869 Glu Ala Gly Ala Tyr 1945 Val	Val Leu Ser Ser Leu 1930 Thr	Thr Gly Glu His 1915 Val Lys His	Pro Ala 1900 Ile Thr Lys	Leu 1885 Lys Lys Lys Glu Leu	1870 Ala Pro His Ala Leu 1950 Ala	Met Asn Ala Arg Gly 1935 Ile	Gln Ala Val 1920 Ala Glu
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Leu Thr 1890 Val Ala 1905 Gln Glu Leu Gln Cys Ala Gln Ala 1970 Val Ser (1985	Ser A 1875 Ser A Ala C Cys S Arg A 1955 Gly A Gly I	L860 Asn 7 Asp 7 Bilu A	Thr S Tyr (Asn (1925 Pro S Arg (111e I Asn I 2005	Lys Ser Gly Glu 1910 Gly Ser Ser Gly Ala 1990 Arg	Pro Arg 1895 Glu Cys Asp Glu Thr 1975 Asp	Glu 1880 Leu Ile Ala Ala Lys 1960 Gln Leu	1865 Glu Ala Gly Ala Tyr 1945 Val Ala Asp Thr	Val Eeu Ser Ser Leu 1930 Thr Ser Cys Thr Glu 2010 Leu	Thr Gly Glu His 1915 Val Lys His Ile Thr 1995 Thr	Pro Ala 1900 Ile Thr Lys Val Thr 1980 Ile Ser	Leu 1885 Lys Lys Lys Glu Leu 1965 Ala Met	1870 Ala Pro His Ala Leu 1950 Ala Phe Asp	Met Asn Ala Arg Gly 1935 Ile Ala Ser Ala His 2015 Lys	Gln Ala Val 1920 Ala Glu Leu Ala Thr 2000 Arg
Leu Thr 1890 Val Ala 1905 Gln Glu Leu Gln Cys Ala Gln Ala 1970 Val Ser 1985 Ala Gly	Ser A 1875 Ser A Ala C Cys S Cys S 1955 Gly A Gly I	1860 Asn 7 Asp 7 Bilu # 11 1940 Arg \ Arg \ Leu # 2020	Thr S Tyr (Asn (1925 Pro S Arg (111 Asn (111 Asn (111 Asn (111 Asn (111 Asn (111 Asn (Lys Ser Gly Glu 1910 Gly Ser Ser Gly Ala 1990 Arg	Pro Arg 1895 Glu Cys Asp Glu Thr 1975 Asp Glu Ala	Glu 1886 Leu i Ile Ala Ala Lys 1960 Gln i Leu Gly	1865 Glu Ala Gly Ala Tyr 1945 Val Ala Asp Thr	Val Leu Ser Ser Leu 1930 Thr Ser Cys Thr Glu 2010 Leu	Thr Gly Glu His 1915 Val Lys His Thr 1995 Thr	Pro Ala 1900 Ile Thr Lys Val Thr 1980 Ile Ser Glu	Leu 1885 Lys Lys Glu Leu 1965 Ala Met Ala Asp	1870 Ala Pro His Ala Leu 1950 Ala Ala Phe Asp	Met Asn Ala Arg Gly 1935 Ile Ala Ser Ala His 2015 Lys	Gln Ala Val 1920 Ala Glu Leu Ala Thr 2000 Arg Val

GIN Ser Ser Val Ala Thr Ile Thr Arg Leu Ala Asp Val Val Lys Leu 2050 2050 Gly Ala Ala Ser Leu Gly Ala Glu Asp Pro Glu Thr Gln Val Val Leu 2065 11e Asn Ala Val Lys Asp Val Ala Lys Ala Leu Gly Asp Leu Ile Ser 2090 2085 Ala Thr Lys Ala Ala Ala Gly Lys Val Gly Asp Asp Pro Ala Val Thr 2100 Gln Leu Lys Asn Ser Ala Lys Val Met Val Thr Asn Val Thr Ser Leu 2115 2120 Gln Leu Lys Asn Ser Ala Lys Val Met Val Thr Asn Val Thr Ser Leu 2115 2120 Cu 1ys Thr Val Lys Ala Glu Asp Glu Ala Thr Lys Gly Thr Arg 2130 Ala Leu Glu Ala Thr Thr Glu His Ile Arg Gln Glu Leu Ala Val Phe 2155 2165 Cys Ser Pro Glu Pro Pro Ala Lys Thr Ser Thr Pro Glu Asp Phe Ile 2165 Cys Ser Pro Glu Pro Pro Ala Lys Thr Ser Thr Pro Glu Asp Phe Ile 2165 Cys Ser Pro Glu Pro Pro Ala Lys Thr Ser Thr Pro Glu Asp Phe Ile 2165 Cys Ser Pro Glu Pro Pro Ala Lys Thr Ser Thr Pro Glu Asp Phe Ile 2165 Cys Ser Pro Glu Pro Pro Ala Lys Thr Ser Thr Pro Glu Asp Phe Ile 2165 Cys Ser Pro Glu Pro Pro Ala Lys Thr Ser Thr Pro Glu Asp Phe Ile 2165 Cys Ser Pro Glu Val Ala Pro 2215 Arg Arg Ala Ile Ala Asp Met Leu Arg Ala Cys Lys Glu Ala Ala Thr 2210 Cly Asn Ser Cys Arg Gln Glu Asp Val Ile Ala Thr Ala Asn Leu Ser 2195 Arg Arg Ala Ile Ala Asp Met Leu Arg Ala Cys Lys Glu Ala Ala Tyr 2210 2225 Arg Glu Cys Ala Asn Gly Tyr Leu Glu Leu Leu Asp His Val Leu Leu 2245 Thr Leu Gln Lys Pro Ser Pro Glu Leu Lys Gln Gln Leu Thr Gly His 2275 Ala Met Lys Gly Thr Glu Trp Val Asp Pro Glu Asp Pro Thr Val Ile 2285 Ala Glu Asn Glu Leu Leu Gly Ala Ala Ala Ala Ala Ile Glu Ala Ala Ala 2275 Ala Glu Asn Glu Leu Leu Gly Ala Ala Ala Ala Ala Ile Glu Ala Ala Ala 2305 Cys Lys Leu Glu Gln Leu Lys Pro Arg Ala Lys Pro Lys Glu Ala Ala Ala 2305 Clys Lys Leu Glu Gln Leu Lys Pro Arg Ala Lys Pro Lys Glu Ala Ala Ala 2305 Clys Lys Leu Glu Gln Leu Lys Pro Arg Ala Lys Pro Lys Glu Ala Ala Ala 2305 Clys Lys Leu Glu Gln Leu Lys Pro Arg Ala Lys Pro Lys Glu Ala Ala Ala 2305 Clys Lys Leu Glu Gln Leu Lys Pro Arg Ala Lys Fro Lys Glu Ala Ala Ala 2305 Clys Cys Cys Cys Vala Ala Gly Lys Val Gly Ala Ile Pro Ala A	2035		2040		204	5
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2420 2425 2430 Ala Ser Thr Ala Gln Leu Leu Val Ala Cys Lys Val Lys Ala Asp Gln 2435 2440 2445 Asp Ser Glu Ala Met Lys Arg Leu Gln Ala Ala Gly Asn Ala Val Lys 2450 2455 2460	Ala Met Lys Gly 2290 Ala Glu Asn Glu 2305 Lys Lys Leu Glu Glu Ser Leu Asn 2340 Ala Ala Ala Thr 2355 Glu Leu Val Ala 2370 Asp Asp Gly Gln 2385	Thr Glu Try 22 Leu Leu Gly 2310 Gln Leu Ly 2325 Phe Glu Gly Ser Ala Le Gln Gly Ly 23 Trp Ser Gly 2390	r Val Thr 2280 p Val Asp 95 y Ala Ala s Pro Arg u Gln Ile 234 u Val Lys 2360 s Val Gly 75 n Gly Leu	Glu Leu Pro Glu Ala Ala 231 Ala Lys 2330 Leu Glu Ala Ala Ala Ile Ile Ser 239	Asp Pro 2300 Ile Glu 5 Pro Lys Ala Ala Ser Ala 2360 Pro Ala 2380 Ala Ala	Thr Val Ile Ala Ala Ala 2320 Glu Ala Asp 2335 Lys Ser Ile 2350 Ala Gln Arg Asn Ala Leu Arg Met Val 2400 Ala Val Gln
Ala Ser Thr Ala Gln Leu Leu Val Ala Cys Lys Val Lys Ala Asp Gln 2435 2440 2445 Asp Ser Glu Ala Met Lys Arg Leu Gln Ala Ala Gly Asn Ala Val Lys 2450 2455 2460	Ala Met Lys Gly 2290 Ala Glu Asn Glu 2305 Lys Lys Leu Glu Glu Ser Leu Asn 2340 Ala Ala Ala Thr 2355 Glu Leu Val Ala 2370 Asp Asp Gly Gln 2385 Ala Ala Ala Thr	Thr Glu Try 22 Leu Leu Gly 2310 Gln Leu Ly 2325 Phe Glu Gly Ser Ala Le Gln Gly Ly 23 Trp Ser Gly 2390 Asn Asn Le 2405	r Val Thr 2280 p Val Asp 95 y Ala Ala s Pro Arg u Gln Ile 234 u Val Lys 2360 s Val Gly 75 n Gly Leu u Cys Glu	Glu Leu Pro Glu Ala Ala 231 Ala Lys 2330 Leu Glu Ala Ala Ala Ala Ile Ile Ser 239 Ala Ala 2410	Asp Pro 2300 Ile Glu S Pro Lys Ala Ala Ser Ala 2360 Pro Ala 2380 Ala Ala 5 Asn Ala	Thr Val Ile Ala Ala Ala 2320 Glu Ala Asp 2335 Lys Ser Ile 2350 Ala Gln Arg 5 Asn Ala Leu Arg Met Val 2400 Ala Val Gln 2415
2435 2440 2445 Asp Ser Glu Ala Met Lys Arg Leu Gln Ala Ala Gly Asn Ala Val Lys 2450 2455 2460	Ala Met Lys Gly 2290 Ala Glu Asn Glu 2305 Lys Lys Leu Glu Glu Ser Leu Asn 2340 Ala Ala Ala Thr 2355 Glu Leu Val Ala 2370 Asp Asp Gly Gln 2385 Ala Ala Ala Thr	Thr Glu Try 22 Leu Leu Gly 2310 Gln Leu Ly 2325 Phe Glu Gly Ser Ala Le Gln Gly Ly 23 Trp Ser Gly 2390 Asn Asn Le 2405	r Val Thr 2280 p Val Asp 95 y Ala Ala s Pro Arg u Gln Ile 234 u Val Lys 2360 s Val Gly 75 n Gly Leu u Cys Glu	Glu Leu Pro Glu Ala Ala 231 Ala Lys 2330 Leu Glu Ala Ala Ala Ala Ile Ile Ser 239 Ala Ala 2410	Asp Pro 2300 Ile Glu S Pro Lys Ala Ala Ser Ala 2360 Pro Ala 2380 Ala Ala 5 Asn Ala	Thr Val Ile Ala Ala Ala 2320 Glu Ala Asp 2335 Lys Ser Ile 2350 Ala Gln Arg 5 Asn Ala Leu Arg Met Val 2400 Ala Val Gln 2415
2435 2440 2445 Asp Ser Glu Ala Met Lys Arg Leu Gln Ala Ala Gly Asn Ala Val Lys 2450 2455 2460	Ala Met Lys Gly 2290 Ala Glu Asn Glu 2305 Lys Lys Leu Glu Glu Ser Leu Asn 2340 Ala Ala Ala Thr 2355 Glu Leu Val Ala 2370 Asp Asp Gly Gln 2385 Ala Ala Ala Thr Gly His Ala Ser	Thr Glu Try 22 Leu Leu Gly 2310 Gln Leu Ly 2325 Phe Glu Glv Ser Ala Le Gln Gly Ly 233 Trp Ser Gl 2390 Asn Asn Le 2405 Gln Glu Ly	r Val Thr 2280 p Val Asp 95 y Ala Ala s Pro Arg u Gln Ile 234 u Val Lys 2360 s Val Gly 75 n Gly Leu u Cys Glu s Leu Ile	Glu Leu Pro Glu Ala Ala 231 Ala Lys 2330 Leu Glu 5 Ala Ala Ile Ile Ser 239 Ala Ala 2410 Ser Ser	Asp Pro 2300 Ile Glu 5 Pro Lys Ala Ala Ser Ala 2360 Pro Ala 2380 Ala Ala 5 Asn Ala Ala Lys	Thr Val Ile Thr Val Ile Ala Ala Ala 2320 Glu Ala Asp 2335 Lys Ser Ile 2350 Ala Gln Arg Asn Ala Leu Arg Met Val 2400 Ala Val Gln 2415 Gln Val Ala 2430
2450 2455 2460	Ala Met Lys Gly 2290 Ala Glu Asn Glu 2305 Lys Lys Leu Glu Glu Ser Leu Asn 2340 Ala Ala Ala Thr 2355 Glu Leu Val Ala 2370 Asp Asp Gly Gln 2385 Ala Ala Ala Thr Gly His Ala Ser	Thr Glu Try 22 Leu Leu Gly 2310 Gln Leu Ly 2325 Phe Glu Gly Ser Ala Le Gln Gly Ly 233 Trp Ser Gl 2390 Asn Asn Le 2405 Gln Glu Ly	r Val Thr 2280 p Val Asp 95 y Ala Ala s Pro Arg u Gln Ile 234 u Val Lys 2360 s Val Gly 75 n Gly Leu u Cys Glu s Leu Ile	Glu Leu Pro Glu Ala Ala 231 Ala Lys 2330 Leu Glu 5 Ala Ala Ile Ile Ser 239 Ala Ala 2410 Ser Ser	Asp Pro 2300 Ile Glu 5 Pro Lys Ala Ala Ser Ala 2360 Pro Ala 2380 Ala Ala 5 Asn Ala Ala Lys	Thr Val Ile Thr Val Ile Ala Ala Ala 2320 Glu Ala Asp 2335 Lys Ser Ile 2350 Ala Gln Arg Asn Ala Leu Arg Met Val 2400 Ala Val Gln 2415 Gln Val Ala 2430
2450 2455 2460	Ala Met Lys Gly 2290 Ala Glu Asn Glu 2305 Lys Lys Leu Glu Glu Ser Leu Asn 2340 Ala Ala Ala Thr 2355 Glu Leu Val Ala 2370 Asp Asp Gly Gln 2385 Ala Ala Ala Thr Gly His Ala Ser 2420 Ala Ser Thr Ala 2435	Ala Gly Ser Thr Glu Try 22 Leu Leu Gly 2310 Gln Leu Ly 2325 Phe Glu Gly Ser Ala Le Gln Gly Ly 23 Trp Ser Gly 2390 Asn Asn Le 2405 Gln Glu Ly 0	r Val Thr 2280 p Val Asp 95 y Ala Ala s Pro Arg u Gln Ile 234 u Val Lys 2360 s Val Gly 75 n Gly Leu u Cys Glu s Leu Ile 242 u Val Ala 2440	Pro Glu Ala Ala 231 Ala Lys 2330 Leu Glu 5 Ala Ala Ala Ile Ile Ser 239 Ala Ala 2410 Ser Ser 5 Cys Lys	228: Asp Pro 2300 Ile Glu 5 Pro Lys Ala Ala Ser Ala 236: Pro Ala 2380 Ala Ala 5 Asn Ala Ala Lys Val Lys 244:	Ala Ala Glu Thr Val Ile Ala Ala Ala 2320 Glu Ala Asp 2335 Lys Ser Ile 2350 Ala Gln Arg Asn Ala Leu Arg Met Val 2400 Ala Val Gln 2415 Gln Val Ala 2430 Ala Asp Gln 5
Arg Ala Ser Asp Asp Leu Val Lvs Ala Ala Glo Lvs Ala Ala Ala Phe	Ala Met Lys Gly 2290 Ala Glu Asn Glu 2305 Lys Lys Leu Glu Glu Ser Leu Asn 2340 Ala Ala Ala Thr 2355 Glu Leu Val Ala 2370 Asp Asp Gly Gln 2385 Ala Ala Ala Thr Gly His Ala Ser 2420 Ala Ser Thr Ala 2435	Ala Gly Ser Thr Glu Try 22 Leu Leu Gly 2310 Gln Leu Ly 2325 Phe Glu Gly Ser Ala Le Gln Gly Ly 23 Trp Ser Gly 2390 Asn Asn Le 2405 Gln Glu Ly 0	r Val Thr 2280 p Val Asp 95 y Ala Ala s Pro Arg u Gln Ile 234 u Val Lys 2360 s Val Gly 75 n Gly Leu u Cys Glu s Leu Ile 242 u Val Ala 2440	Pro Glu Ala Ala 231 Ala Lys 2330 Leu Glu 5 Ala Ala Ala Ile Ile Ser 239 Ala Ala 2410 Ser Ser 5 Cys Lys	228: Asp Pro 2300 Ile Glu 5 Pro Lys Ala Ala Ser Ala 236: Pro Ala 2380 Ala Ala 5 Asn Ala Ala Lys Val Lys 244:	Ala Ala Glu Thr Val Ile Ala Ala Ala 2320 Glu Ala Asp 2335 Lys Ser Ile 2350 Ala Gln Arg Asn Ala Leu Arg Met Val 2400 Ala Val Gln 2415 Gln Val Ala 2430 Ala Asp Gln 5
And the best time them been the byte time and the time	2275 Ala Met Lys Gly 2290 Ala Glu Asn Glu 2305 Lys Lys Leu Glu Glu Ser Leu Asn 2340 Ala Ala Ala Thr 2355 Glu Leu Val Ala 2370 Asp Asp Gly Gln 2385 Ala Ala Ala Thr Gly His Ala Ser 2420 Ala Ser Thr Ala 2435 Asp Ser Glu Ala 2450	Ala Gly Ser Thr Glu Try 22 Leu Leu Gl; 2310 Gln Leu Ly; 2325 Phe Glu Gl; Ser Ala Le; Gln Gly Ly; 23 Trp Ser Gl; 2390 Asn Asn Le; 2405 Gln Glu Ly; Gln Leu Le; Met Lys Arg	r Val Thr 2280 p Val Asp 95 y Ala Ala s Pro Arg u Gln Ile 234 u Val Lys 2360 s Val Gly 75 n Gly Leu u Cys Glu s Leu Ile 242 u Val Ala 2440 g Leu Gln	Fight Leu Fro Glu Ala Ala 231 Ala Lys 2330 Eleu Glu S Ala Ala Ala Ile Ele Ser 239 Ala Ala Ala Ala Comparison Cys Lys Ala	228: Asp Pro 2300 Ile Glu 5 Pro Lys Ala Ala Ser Ala 236: Pro Ala 2380 Ala Ala 5 Asn Ala Ala Lys Val Lys 244: Gly Asn 2460	Ala Ala Glu Thr Val Ile Ala Ala Ala 2320 Glu Ala Asp 2335 Lys Ser Ile 2350 Ala Gln Arg Asn Ala Leu Arg Met Val 2400 Ala Val Gln 2415 Gln Val Ala 2430 Ala Asp Gln 5 Ala Val Lys

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2470
                                      2475
Glu Glu Glu Asn Glu Thr Val Val Val Lys Glu Lys Met Val Gly
                       2490
              2485
Gly Ile Ala Gln Ile Ile Ala Ala Gln Glu Glu Met Leu Arg Lys Glu
                             2505
                                                 2510
           2500
Arg Glu Leu Glu Glu Ala Arg Lys Lys Leu Ala Gln Ile Arg Gln Gln
                                            2525
                 2520
Gln Tyr Lys Phe Leu Pro Ser Glu Leu Arg Asp Glu His
   2530
                2535
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tetgetetac cettetecat gactgetgee tggtetgtee tageettget etgatecaca
ctqaqctqqc cttgaqcagg gtcgcacctg tacatgaaga caatggctgg tttctcactg
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346
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<212> PRT
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Met Asp Gly Thr Val Ile His Met Leu Pro Leu Pro Pro Val Gln Arg
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His His Trp Phe Thr Glu Ala Lys Gly Glu Ser Ser Glu Lys Pro Ala
                              25
                                                 30
           2.0
Ile Val Phe Met Tyr Arg Cys Asp Pro Ala Gln Gly Gln Leu Ser Val
                                              45
                          40
Asp Gln Ser Lys Ala Arg Thr Asp Gln Ala Ala Val Met Glu Lys Gly
                                          60
                      55
   50
Arg Ala Glu Asn Ala Leu Leu Gln Asp Ser Glu Lys Lys Arg Ser His
                                     75
                  70
Ser Ser Pro Ser Gln Ile Pro Lys Lys Ile Leu Ser His Met Thr His
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             85
Glu Val Thr Glu Asp Phe Ser Pro Arg Asp
                              105
           100
<210> 1705
<211> 377
<212> DNA
<213> Homo sapiens
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<400> 1705

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ctggtgctcc aatcgagttg cagaaaggta tacagggtgg agcaagttta tttaatcctg
gttttggctg gaaccaaaat ccacaagttc aaaccttgaa gaattctcaa ggttctattc
240
ataatttagt gaggtotgga gttactgttg aaaggaaagt taatgtaggg gcacaaggag
300
cttttaactc tgcccctgca ccacagatgg aatttcccac agttcctcca tacaacccct
360
cttccttcgg agctagc
377
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<211> 110
<212> PRT
<213> Homo sapiens
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Met Asp Lys Thr Lys Pro Ser Asn Pro Phe Ser Met Gly Gln İle Pro
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Asn Phe Pro Glu Gly Leu Ala Ser Thr Gly Ala Pro Ile Glu Leu Gln
            20
                                25
                                                     30
Lys Gly Ile Gln Gly Gly Ala Ser Leu Phe Asn Pro Gly Phe Gly Trp
        35
                            40
                                                 45
Asn Gln Asn Pro Gln Val Gln Thr Leu Lys Asn Ser Gln Gly Ser Ile
                        55
                                            60
His Asn Leu Val Arg Ser Gly Val Thr Val Glu Arg Lys Val Asn Val
                    70
                                        75
Gly Ala Gln Gly Ala Phe Asn Ser Ala Pro Ala Pro Gln Met Glu Phe
                85
                                    90
Pro Thr Val Pro Pro Tyr Asn Pro Ser Ser Phe Gly Ala Ser
           100
                                105
                                                    110
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<211> 427
<212> DNA
<213> Homo sapiens
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cateacgeca agegagtget cateateggg geegggetag eeggcatgga ggetgegega
gttctcagcg aacgcgcaca cgaacctctc atcgtcgagg ccagcgacca cattggcgga
180
gtcatccttg cgggtggtca accttccttc aaggaggacg acctagctct gctggagtgg
taccgcacca ccctggagga gttgggcgtg gagattcgac tcaacaccac cgtaacggct
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gatettateg etteettegg ggeegateae gtegteetgg egaceggate gaggeegegt
360
cgactcgacc taggtgatga tgccaaggtc attgacgcca ccgacgctct gctcaaccgc
420
gacgcgt
427
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<212> PRT
<213> Homo sapiens
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                                    10
                5
1
Pro Val Leu Arg His His Ala Lys Arg Val Leu Ile Ile Gly Ala Gly
                                                    30
            20
                                25
Leu Ala Gly Met Glu Ala Ala Arg Val Leu Ser Glu Arg Ala His Glu
                            40
       35
Pro Leu Ile Val Glu Ala Ser Asp His Ile Gly Gly Val Ile Leu Ala
                        55
                                            60
Gly Gly Gln Pro Ser Phe Lys Glu Asp Asp Leu Ala Leu Leu Glu Trp
                    70
Tyr Arg Thr Thr Leu Glu Glu Leu Gly Val Glu Ile Arg Leu Asn Thr
                                    90
Thr Val Thr Ala Asp Leu Ile Ala Ser Phe Gly Ala Asp His Val Val
                                                    110
           100
Leu Ala Thr Gly Ser Arg Pro Arg Arg Leu Asp Leu Gly Asp Asp Ala
                                                125
                            120
        115
Lys Val Ile Asp Ala Thr Asp Ala Leu Leu Asn Arg Asp Ala
                        135
                                            140
<210> 1709
<211> 446
<212> DNA
<213> Homo sapiens
<400> 1709
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ctgttctttt ctgactgatg actgggagtc agggaagatg aatgcagagt ctgtgatcac
ctectettee agecacatea tateteagee teetggagga aacteeeata gettgtetet
180
tragtricage ttgaragett ctgaacgttt craagagaat agttriggatr attragaaac
240
caggttgttg caagaggtct tettteagge aateetgett getgtgtget taateattte
300
tgcatgtgca agatgggtta tgggagaaat attagccagt gtcttcacat gctcattgat
gataactgta gcttatgtga aatcattgtt teteageett geeagetatt teaaaaceae
tgcctgtgct cggtttgtca aaattt
446
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<211> 116
<212> PRT
<213> Homo sapiens
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Met Asn Ala Glu Ser Val Ile Thr Ser Ser Ser Ser His Ile Ile Ser
                5
                                    10
                                                        15
Gln Pro Pro Gly Gly Asn Ser His Ser Leu Ser Leu Gln Ser Gln Leu
            20
                                25
                                                    30
Thr Ala Ser Glu Arg Phe Gln Glu Asn Ser Ser Asp His Ser Glu Thr
                            40
                                                45
Arg Leu Leu Gln Glu Val Phe Phe Gln Ala Ile Leu Leu Ala Val Cys
                        55
                                            60
Leu Ile Ile Ser Ala Cys Ala Arg Trp Val Met Gly Glu Ile Leu Ala
                    70
                                        75
Ser Val Phe Thr Cys Ser Leu Met Ile Thr Val Ala Tyr Val Lys Ser
                                   90
               85
Leu Phe Leu Ser Leu Ala Ser Tyr Phe Lys Thr Thr Ala Cys Ala Arg
                               105
                                                    110
Phe Val Lys Ile
        115
<210> 1711
<211> 426
<212> DNA
<213> Homo sapiens
<400> 1711
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cactagaaca tgaacaggga aagcagagga aatacttgta gaaagtattt tttacagctc
ceteaataca atteagtaat gtteatteet ggtgagaagt etgteegeac acacageate
agecaageag cagaageagt ggtgtctggg gggctgggaa gtttttcccc caaataccca
coccatgoac tgcccagtoc coagaccoca aagactttgt cotcgcctca cgcacctttt
gcaggctcac actgtctgtg tgcgcaagag gtagcgacag gagacaatgg ggaaagagct
gaaggaggca aacaaggcca gggggaaagc ctacctcgag gcacagaggg gccccaagat
420
ggatat
426
<210> 1712
<211> 119
<212> PRT
<213> Homo sapiens
<400> 1712
Met Asn Arg Glu Ser Arg Gly Asn Thr Cys Arg Lys Tyr Phe Leu Gln
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10
Leu Pro Gln Tyr Asn Ser Val Met Phe Ile Pro Gly Glu Lys Ser Val
            20
                                25
Arg Thr His Ser Ile Ser Gln Ala Ala Glu Ala Val Val Ser Gly Gly
       35
                           40
Leu Gly Ser Phe Ser Pro Lys Tyr Pro Pro His Ala Leu Pro Ser Pro
                       55
                                            60
Gln Thr Pro Lys Thr Leu Ser Ser Pro His Ala Pro Phe Ala Gly Ser
                                        75
                   70
His Cys Leu Cys Ala Gln Glu Val Ala Thr Gly Asp Asn Gly Glu Arg
                                    90
Ala Glu Gly Gly Lys Gln Gly Gln Gly Glu Ser Leu Pro Arg Gly Thr
                                105
            100
Glu Gly Pro Gln Asp Gly Tyr
<210> 1713
<211> 328
<212> DNA
<213> Homo sapiens
<400> 1713
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ggtcatgatg aggtcagctt tggaggagca gggccagcgt gtcctgcttt ctgctcctgg
180
aatgageete aeteeeteee tgeteaagge ageeetteae eeageegeeg ggacaggtge
cctgtgccac ctgccatccc tgggattctc catctcagtg agtgctccct ggggcctggg
aacgcatctg gctggtgact cctggggg
<210> 1714
<211> 99
<212> PRT
<213> Homo sapiens
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Met Gly Gln Gly Leu Cys Phe Gln Ser Gln Glu Gly Leu Lys Pro Glu
1
                                   10
Leu Ala Leu Ala Ala Cys His Arg Val Trp Pro Gly Asp Pro Gly Pro
Gln Gln Gly His Asp Glu Val Ser Phe Gly Gly Ala Gly Pro Ala Cys
                           40
Pro Ala Phe Cys Ser Trp Asn Glu Pro His Ser Leu Pro Ala Gln Gly
Ser Pro Ser Pro Ser Arg Arg Asp Arg Cys Pro Val Pro Pro Ala Ile
                                       75
Pro Gly Ile Leu His Leu Ser Glu Cys Ser Leu Gly Pro Gly Asn Ala
                                   90
Ser Gly Trp
```

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<210> 1715
<211> 489
<212> DNA
<213> Homo sapiens
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gatgececat gtgtgacatt etgtggatag ttattgttag cattatttga caagttetag
120
aaatcgatcc acccaggcgt gtagctgcgg tatttcatca gagttgatcg ttgcgatgag
ttgatcatgg cctgtcatgg cgtagtcttc tacgtcgtaa agtatgagac aatccacggt
240
aatatggtgt tttttggcca actcggaagc cggggtgtcg gggaagtcgg tccctgtaag
gtatgggcct gtcccaatga cgacgtgtgc tgggtccatg aggagttcgt ccaaggttcg
aactcattac cgtcgaatac gacgctgtcg ccatcggcgg tgtcgaatcg aatcctcaaa
gtgtatccgt actcggtgtc gcgcaacagg tgcctaacct cagcgctagt gggctgtgca
480
ctgacgcgt
489
<210> 1716
<211> 101
<212> PRT
<213> Homo sapiens
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Met Ala Cys His Gly Val Val Phe Tyr Val Val Lys Tyr Glu Thr Ile
His Gly Asn Met Val Phe Phe Gly Gln Leu Gly Ser Arg Gly Val Gly
           20
                                25
Glu Val Gly Pro Cys Lys Val Trp Ala Cys Pro Asn Asp Asp Val Cys
       35
                                                45
Trp Val His Glu Glu Phe Val Gln Gly Ser Asn Ser Leu Pro Ser Asn
   50
                       55
                                           60
Thr Thr Leu Ser Pro Ser Ala Val Ser Asn Arg Ile Leu Lys Val Tyr
                    70
                                       75
Pro Tyr Ser Val Ser Arg Asn Arg Cys Leu Thr Ser Ala Leu Val Gly
                                    90
                85
Cys Ala Leu Thr Arg
<210> 1717
<211> 312
<212> DNA
<213> Homo sapiens
<400> 1717
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nggcatacaa cggagtaaaa accacatcaa cagaagtgga aacaggccca gagagcgtga
gaggtttctg gtttcaagaa ggcacactga gtccctgcac ccgatgcctc tccttcccca
aatcccactg gaatacacag agagacataa aaacaaggag tgtcctgtag cagagcagcc
aggetggete atgagacaga gggageagte ttetgggaga catggetett getgetgegg
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catgaatgtg tc
312
<210> 1718
<211> 101
<212> PRT
<213> Homo sapiens
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Met Ala Gly Pro Arg Lys Pro Pro Glu Lys Gly Pro Leu Leu Ser Met
                                    10
Asp Leu Leu Ala Asp Pro Gln Gln Gln Glu Pro Cys Leu Pro Glu Asp
Cys Ser Leu Cys Leu Met Ser Gln Pro Gly Cys Ser Ala Thr Gly His
                            40
Ser Leu Phe Leu Cys Leu Ser Val Tyr Ser Ser Gly Ile Trp Gly Arg
                                            60
                        55
Arg Gly Ile Gly Cys Arg Asp Ser Val Cys Leu Leu Glu Thr Arg Asn
                                        75
                    70
65
Leu Ser Arg Ser Leu Gly Leu Phe Pro Leu Leu Met Trp Phe Leu
                85
                                    90
Leu Arg Cys Met Pro
           100
<210> 1719
<211> 404
<212> DNA
<213> Homo sapiens
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tcagagacaa tccaaccggc ctgcaaaact gcggtcttgc ccggggcaac gtcgtagggt
120
ccaacagttt ctccaacctc ataggtagaa gaagtgctat agctgctgga aatggagatg
tggatcacat cgagcagtgg gaagtcaatg cctgccgaaa ccgaccagtt cttcgtctta
gtttctgtga tggatcgcgt gaccggctgc ggagtgtcgt tgagttggaa atcgtcacgt
cccagcagag ccatcgaagt agctgcgcac cacatgaacg ggctgtccgt gtcacccgga
ttcgagcagg gagcacccat tggtgngtgg tgtccccggg ggtt
404
```

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<211> 126
<212> PRT
<213> Homo sapiens
<400> 1720
Met Gly Ala Pro Cys Ser Asn Pro Gly Asp Thr Asp Ser Pro Phe Met
                                    10
Trp Cys Ala Ala Thr Ser Met Ala Leu Leu Gly Arg Asp Asp Phe Gln
                                25
                                                    30
           20
Leu Asn Asp Thr Pro Gln Pro Val Thr Arg Ser Ile Thr Glu Thr Lys
                                                45
                            40
Thr Lys Asn Trp Ser Val Ser Ala Gly Ile Asp Phe Pro Leu Leu Asp
                        55
Val Ile His Ile Ser Ile Ser Ser Ser Tyr Ser Thr Ser Ser Thr Tyr
                                        75
                    70
Glu Val Gly Glu Thr Val Gly Pro Tyr Asp Val Ala Pro Gly Lys Thr
               85
Ala Val Leu Gln Ala Gly Trp Ile Val Ser Asp Phe Glu Gly Gln His
           100
                               105
Thr Val Cys Gly Pro Asp Lys Lys Trp Gln Gly Arg Gly Asp
                            120
       115
<210> 1721
<211> 529
<212> DNA
<213> Homo sapiens
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gctgggcacc tgtgatgtcc aggcactccc tgcttggatt gggggatctg ggtttcatct
teccagetee teetgteete egetgggeae etgtgatgte caggeaetee etgettggat
cggggggtct gggttttgtg ctatacttgg tgctcccttt cactcaggcc ccttcttgac
360
totgcagago tacccotogo catotottto aegegggeet cotgcagtet etgtgctcac
420
cctgtgactc tgcttccggt gttgtcaaat gggggtcatc ccaggacccg caccactggg
togtgtgcag gtttctgggg tggcagagtg cggatgagtg ggcacgcgt
529
<210> 1722
<211> 118
<212> PRT
<213> Homo sapiens
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Met Ala Thr Leu Ser Gly Gln Ser Cys Pro Ser His Ala Gly Gly Ala
                                    10
Thr Gly Pro Gly Arg Cys Gly Phe Ser Leu Pro Ala Pro Pro Val Leu
           20
Cys Trp Ala Leu Val Met Ser Arg His Ser Leu Leu Gly Ser Gly Asp
                                               45
        35
                           40
Leu Gly Phe Ile Phe Pro Ala Pro Pro Val Leu Cys Trp Ala Pro Val
                       55
Met Ser Arg His Ser Leu Leu Gly Leu Gly Asp Leu Gly Phe Ile Phe
                    70
                                        75
Pro Ala Pro Pro Val Leu Arg Trp Ala Pro Val Met Ser Arg His Ser
                                   90
               85
Leu Leu Gly Ser Gly Gly Leu Gly Phe Val Leu Tyr Leu Val Leu Pro
            100
                                105
                                                    110
Phe Thr Gln Ala Pro Ser
       115
<210> 1723
<211> 371
<212> DNA
<213> Homo sapiens
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120
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tgcattcaat a
371
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<211> 111
<212> PRT
<213> Homo sapiens
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                                    10
1
Asp Gly His Arg Gly Val Ala Ile Tyr Leu Thr Val Asp Val Asp Ala
           20
                                25
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Gln Glu Leu Leu Gln Leu Arg Met Glu Lys Glu Glu Met Glu Glu Glu
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Leu Arg Thr Gln Glu Glu Leu Lys Glu Leu Gln Ala Glu Arg Gln Ser
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Gln Glu Val Ala Gly Arg His Arg Asp Arg Glu Leu Glu Lys Gln Leu
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Ala Val Leu Arg Val Glu Ala Asp Arg Gly Arg Glu Leu Glu Glu Gln
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Asn Leu Gln Leu Gln Lys Thr Leu Gln Gln Leu Arg Gln Asp Cys Glu
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Glu Ala Ser Lys Ala Lys Met Val Ala Glu Ala Glu Ala Thr Val Leu
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Glu Asn Asp Glu Phe Arg Arg Ile Leu Gly Leu Glu Gln Gln Leu
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Asp His Thr Leu Asn Glu Thr Asp His Ser Tyr Glu Ser His Lys Gln
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Gln Ser Glu Ile Asp Val Gln Thr Phe Thr Lys Lys Gln Tyr Leu Lys
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Thr Lys Lys Thr Glu Ala Ser Thr Glu Cys Ser His Lys Gln Ser Leu
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His Asp Val Lys Pro Gly Asp Thr Val Thr Ile His Thr Pro Gly Trp
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Pro Thr Ser Leu Xaa Pro Leu Ala Arg Arg Asp Arg Gly Ala Gly Arg
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Leu Phe Leu Phe Phe Ile Leu Val Ala Val Arg His Ser His Pro Pro
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Gly Thr Val Pro Trp Leu Gln Gly Leu Ile Cys Asn Val Asn Asn Thr
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Cys Phe Pro Gln Leu Thr Pro Gly Glu Glu Pro Gly Arg Leu Ser Asn
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Val Ile Ala Gly Ser Thr Gly Asn Cys Thr Leu Cys Val Glu Asp Tyr
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n1 -	N	~1		Dha	u.l	ca-	Tur		Pro	Ara	λen	Tire		Aen	Leu
Ald	Asp		АБР	PHE	val	Ser	120	1111	FIU	MIG	vab	125	GIII	Abii	Deu
****	~1.v	115	τ	Cln	C1.	T 011		Dro	Gly	17a l	λνα		Glu	Sor	Len
HIS		ASII	Leu	GIII	GIY	135	GIY	PLO	GIY	vaı	140	Val	Gru	361	Deu
a 1	130	×1-	т1.	7	T		T1.	uic	Asp	Dha		Gl n	Lan	Sor	Glu
	Leu	Ald	116	Arg	•	GIU	TIE	птэ	мэр	155	АІА	GIII	neu	361	160
145	mb	//*a essa	uic	v-1	150	ui.	700	Thr	Glu		T 011	Trn	Gly	Glu	
ASII	III	ıyı	nis		ıyı	nis	ASII	1111	170	ASP	Deu	ırp	Gry	175	FIU
ui-	77-	Wal.	7.1 -	165	ui c	Cly	Clu	Acn	Asp	Len	uic	Va 1	Thr		Glu
nis	Ald	val	180	116	nis	Gry	Gru	185	чэр	пеа	1113	Val	190	0.14	014
W-1	T1/~	T v.c		Dro	1.011	Dhe	T Au		Pro	Thr	Tur	Δτα		нie	Δrα
Val	IYL	195	ALG	P10	пеп	FILE	200	GIII	110	1111	1 Y L	205	- 7 -		n. y
Low	Dro		Dro	Clu	Gl n	Clv		Dro	Leu	Glu	λla		T.e.u	Asn	Δla
Leu	210	Leu	FIU	Giu	Gili	215	361	FLO	Deu	GIU	220	0111	шси	nop.	mu
Dho		Cor	Val.	tau) xa		Thr	Dro	Ser	Leu		Gln	ī.en	Ara	Δsn
225	val	JCI	Vai	DCu	230	O.L.			561	235	200	0			240
	Hie	Glv	Pro	Pro		Δla	T.eu	Val	Phe		Cvs	Gln	Met	Glv	
AIG	1113	Oly	110	245	110		DC 4		250		-,-			255	
Glv	Δτα	Thr	Asn		Glv	Met	Val	Len	Gly	Thr	Leu	Tle	Leu		His
019	nr 9	****	260	200	017			265	0_1				270		
Ara	Ser	Glv		Thr	Ser	Gln	Pro		Ala	Ala	Pro	Thr		Ala	Lvs
		275					280					285			•
Pro	Leu		Met	Glu	Gln	Phe		Val	Ile	Gln	Ser	Phe	Leu	Arq	Met
						295					300			•	
	290														
Val		Gln	Gly	Arg	Arg		Val	Glu	Glu	Val	Asp	Arg	Ala	Ile	Thr
Val 305		Gln	Gly	Arg	Arg 310		Val	Glu	Glu	Val 315	Asp	Arg	Ala	Ile	Thr 320
305	Pro		_		310	Met				315					320
305	Pro		_		310	Met			Glu Glu 330	315					320
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305 Ala Lys Ser Phe Ala 385 Tyr Asp	Pro Cys Lys Arg Tyr 370 Phe Arg Leu	Ala Leu His 355 Leu Ala Leu Ile Leu 435	Glu Glu 340 Ser Ile Leu Pro Ala 420 Ser	Leu 325 Gly Val Leu Ser Val 405 Arg	310 His Ile Trp Phe 390 Thr Gly Val	Met Asp Arg Gln Asn 375 Ser Leu Ser Arg	Leu Pro Arg 360 Tyr Arg Ser Leu Glu 440	Lys Glu 345 Ala Tyr Trp Ser Arg 425 Met	Glu 330 Ser Leu Leu Ala 410 Glu	315 Val Pro Trp His Cys 395 Gly Asp	Val Ala Ser Glu 380 Ala Pro Asp	Leu Gln Leu 365 Gln His Val Leu Asn 445	Glu Gly 350 Glu Tyr Pro Ala Val 430 Phe	Asn 335 Ser Arg Pro Glu Pro 415 Ser Arg	320 Gln Gly Tyr Leu 400 Arg Pro
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305 Ala Lys Ser Phe Ala 385 Tyr Asp Val Leu	Pro Cys Lys Arg Tyr 370 Phe Arg Leu Ala Pro 450	Ala Leu His 355 Leu Ala Leu Ile Leu 435 Arg	Glu Glu 340 Ser Ile Leu Pro Ala 420 Ser Met	Leu 325 Gly Val Leu Ser Val 405 Arg Thr	310 His Ile Trp Phe 390 Thr Gly Val Ile Ala	Met Asp Arg Gln Asn 375 Ser Leu Ser Arg Tyr 455	Leu Pro Arg 360 Tyr Arg Ser Leu Glu 440 Gly	Lys Glu 345 Ala Tyr Trp Ser Arg 425 Met	Glu 330 Ser Leu Leu Ala 410 Glu	315 Val Pro Trp His Cys 395 Gly Asp Val Gln	Val Ala Ser Glu 380 Ala Pro Asp Ala	Leu Gln Leu 365 Gln His Val Leu Asn 445 Ser	Glu Gly 350 Glu Tyr Pro Ala Val 430 Phe	Asn 335 Ser Arg Pro Glu Pro 415 Ser Arg	320 Gln Gly Tyr Leu 400 Arg Pro Arg Ala Arg
305 Ala Lys Ser Phe Ala 385 Tyr Asp Val Leu 465	Pro Cys Lys Arg Tyr 370 Phe Arg Leu Ala Pro 450 Gly	Ala Leu His 355 Leu Ala Leu Ile Leu 435 Arg	Glu 340 Ser Ile Leu Pro Ala 420 Ser Met Ile	Leu 325 Gly Val Leu Ser Val 405 Arg Thr Pro Leu	310 His Ile Trp Phe 390 Thr Gly Val Ile Ala 470	Met Asp Arg Gln Asn 375 Ser Leu Ser Arg Tyr 455 Tyr	Leu Pro Arg 360 Tyr Arg Ser Leu Glu 440 Gly Leu	Lys Glu 345 Ala Tyr Trp Ser Arg 425 Met Thr	Glu 330 Ser Leu Leu Leu Ala 410 Glu Asp	315 Val Pro Trp His Cys 395 Gly Val Gln Ala 475	Val Ala Ser Glu 380 Ala Pro Asp Ala Pro 460 Lys	Leu Gln Leu 365 Gln His Val Leu Asn 445 Ser	Glu Gly 350 Glu Tyr Pro Ala Val 430 Phe Ala Arg	Asn 335 Ser Arg Pro Glu Pro 415 Ser Arg Lys	320 Gln Gly Tyr Leu 400 Arg Pro Arg Ala Arg

490

Gly His Thr Tyr Ser Leu Arg Trp Pro Gly Pro Pro Val Ala Pro Asp

485

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500 505 510
Gln Leu Glu Thr Leu Glu Ala Gln Leu Lys Ala His Leu Ser Glu Pro
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                           525
Pro Pro Gly Lys Glu Gly Pro Leu Thr Tyr Arg Phe Gln Thr Cys Leu
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                         540
Thr Met Gln Glu Val Phe Ser Gln His Arg Arg Ala Cys Pro Gly Leu
       550
                      555
Thr Tyr His Arg Ile Pro Met Pro Asp Phe Cys Ala Pro Arg Glu Glu
      565 570
Asp Phe Asp Gln Leu Leu Glu Ala Leu Arg Ala Ala Leu Ser Lys Asp
       580 585
                               590
Pro Gly Thr Gly Phe Val Phe Ser Cys Leu Ser Gly Gln Gly Arg Thr
     595 600 605
Thr Thr Ala Met Val Val Ala Val Leu Ala Phe Trp His Ile Gln Gly
         615
                         620
Phe Pro Glu Val Gly Glu Glu Leu Val Ser Val Pro Asp Ala Lys
              630 635
Phe Thr Lys Gly Glu Phe Gln Val Val Met Lys Val Val Gln Leu Leu
                          650
Pro Asp Gly His Arg Val Lys Lys Glu Val Asp Ala Ala Leu Asp Thr
                               670
        660 665
Val Ser Glu Thr Met Thr Pro Met His Tyr His Leu Arg Glu Ile Ile
                    680
                            685
Ile Cys Thr Tyr Arg Gln Ala Lys Ala Ala Lys Glu Ala Gln Glu Met
         695 700
Arg Arg Leu Gln Leu Arg Ser Leu Gln Tyr Leu Glu Arg Tyr Val Cys
      710 715 720
Leu Ile Leu Phe Asn Ala Tyr Leu His Leu Glu Lys Ala Asp Ser Trp
          725 730
Gln Arg Pro Phe Ser Thr Trp Met Gln Glu Val Ala Ser Lys Ala Gly
       740 745 750
Ile Tyr Glu Ile Leu Asn Glu Leu Gly Phe Pro Glu Leu Glu Ser Gly
   755 760
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Cys Ser Leu Glu Pro Ser Ala Pro Glu Asp Leu Leu
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                                25
Asn Ala Thr Thr Ile Lys Ile Ala Thr Val Asn Arg Ser Gly Ser Glu
                            40
                                                45
Glu Lys Arg Trp Asp Lys Ile Gln Glu Leu Val Lys Lys Asp Gly Ile
   50
                        55
                                            60
Thr Leu Glu Phe Thr Glu Phe Thr Gly Tyr Ser Gln Pro Asn Lys Ala
Thr Ala Asp Gly Glu Val Asp Leu Asn Ala Phe Gln His Tyr Asn Phe
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Leu Asn Asn Trp Asn Lys Glu Asn Gly Lys Asp Leu Val Ala Ile Ala
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Asp Thr Tyr Ile Ser Pro Ile Arg Leu Tyr Ser Gly Leu Asn Gly Ser
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tggcacatca tgtaccagta cgaaccacac gcggatgggc acggcctctg gggacatgtc
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acttccccca acttctctcc ctttaactgg acagacggag aagacattct ggttccagag
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ggcgaggaaa ccgacctgtg ggcaggttct gttattagca acgctggaaa agtgacgctg
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Met Tyr Gln Tyr Glu Pro His Ala Asp Gly His Gly Leu Trp Gly His
Val Thr Ser Pro Asn Phe Ser Pro Phe Asn Trp Thr Asp Gly Glu Asp
                        55
                                            60
Ile Leu Val Pro Glu Gly Glu Glu Thr Asp Leu Trp Ala Gly Ser Val
                    70
                                        75
Ile Ser Asn Ala Gly Lys Val Thr Leu Phe Phe Thr Ser Val Lys Gly
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Asp Xaa Asp Gly Asn Pro Ser Gly Arg Cys Arg Arg Arg Gln Ser Tyr
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cccagggctg ggtctgggag tcctcagtgt ccacttgtcc caggttaggg ggcttgcctt
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720
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ggccgtaacc ctagtttgcc tgaggccctt atgtcccctt atgttcctgg tactggagct
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                                25
Gly Ile Ala Cys Gly Pro Leu Asn Ser Trp Gly Ser Gly Arg Asn Pro
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caggageceg agatettatt tettgaegag cegacaaate acettgaett geeacaceag
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Gly Val Ser Glu Leu Thr Asp Arg Ala Trp Ser Ser Leu Ser Gly Gly
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Glu Arg Gln Arg Val Gln Leu Ala Arg Ala Leu Ala Gln Glu Pro Glu
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                        55
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Ile Leu Phe Leu Asp Glu Pro Thr Asn His Leu Asp Leu Pro His Gln
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                    70
65
Ile Asp Leu Leu Glu Arg Val Arg Gly Leu Gly Leu Thr Thr Val Thr
                                    90
Val Ile His Asp Leu Asp Leu Ala Ala Tyr Ala Asp Asp Leu Ile
                                                    110
                                105
            100
Val Leu Asp Ser Gly Arg Met Val Ala Gly Gly Pro Ala Ser Thr Val
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                            120
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Leu Thr Pro Gly Leu Val Arg Asp His Phe Gly Val Asp Gly Glu Val
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Leu Leu Asp Arg Asp Ser Lys Asp Thr Gln Thr Arg Ile Ser Gln Lys
                                               45
                           40
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Gly Arg Arg Leu Gln Pro Pro Gly Thr Pro Ser Ala Pro Pro Gln Arg
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Arg Pro Arg Lys Gln Leu Asn Pro Cys Arg Gly Thr Glu Arg Val Asp
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Pro Gly Phe Glu Gly Val Thr Leu Lys Phe Gln Ile Lys Pro Asp Ser
                                   90
               85
Ser Leu Gln Ile Ile Pro Thr Tyr Ser Leu Pro Cys Ser Ser Arg Ser
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Gln Glu Ser Pro Ala Asp Ala Val Gly Gly Xaa Ala Ala Ile Pro Glu
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                           120
Gly Thr Glu Gly His Ser Ala Gly Ser Glu Ala Leu Glu Pro Arg Arg
                                           140
                        135
Cys Ala Ser Cys Arg Thr Gln Arg Thr Pro Leu Trp Arg Asp Ala Glu
                                        155
                   150
Asp Gly Thr Leu Leu Cys Asn Ala Cys Gly Ile Arg Tyr Lys Lys Tyr
                                                        175
                                   170
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Gly Thr Arg Cys Ser Ser Cys Trp Leu Val Pro Arg Lys Asn Val Gln
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240
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Met Gly Ala Ile Arg Asn Asp Gln Gly Glu Ser Leu Ile Arg Thr Ala
                                    10
Phe Gln Cys Leu Gln Leu Val Val Thr Asp Phe Leu Pro Thr Met Pro
            20
Cys Thr Cys Leu Gln Ile Val Val Asp Val Ala Gly Ser Phe Gly Leu
                            40
His Asn Gln Glu Leu Asn Ile Ser Leu Thr Ser Ile Gly Leu Leu Trp
   50
                        55
Asn Ile Ser Asp Tyr Phe Phe Gln Arg Gly Glu Thr Ile Glu Lys Glu
                                        75
                    70
Leu Asn Lys Glu Glu Ala Ala Gln Gln Lys Gln Ala Glu Glu Lys Gly
                                    90
Val Val Leu Asn Arg Pro Phe His Pro Ala Pro Pro Phe Asp Cys Leu
                                105
                                                    110
           100
Trp Leu Cys Leu Tyr Ala Lys Leu Gly Glu Leu Cys Val Asp
                            120
<210> 1757
<211> 1297
<212> DNA
<213> Homo sapiens
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gegeacagea tecatggeac caaceeteaa tatetggtgg agaagateat tegaacgega
120
atctatgagt ccaagtactg gaaagaggag tgctttggac ttacagctga acttgtagtc
180
gataaagcca tggagttaag gtttgtgggt ggcgtctatg gtggcaacat aaaaccaaca
ccctttctgt gtttaacctt gaagatgctt caaattcaac ccgagaagga tatcattgta
gagtttatca aaaatgaaga tttcaagtat gtccgcatgc tgggggcact ttacatgagg
360
ctgacaggea ctgcaattga ttgctacaag tacttggaac ctttgtacaa tgactatcga
aaaatcaaga gccagaaccg aaatggggag tttgaattga tgcatgttga tgagtttatt
480
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gatgaactat tgcacagtga gagagtctgt gatatcattc tgccccgact acagaaacgc
540
tatgtattag aggaagetga geaactggag cetegagtta gtgetetgga agaggacatg
600
gatgatgtgg agtccagtga agaggaagaa gaggaggatg agaagttgga aagagtgcca
660
tcacctgate acegeoggag aagetacega gaettggaca ageccegteg eteteccaca
ctgcgctaca ggaggagtag gagccggtct cccagaaggc ggagtcgatc tcccaaaagg
agaagcccct cccctcgccg agaaaggcat cggagcaaga gtccaagacg tcaccgcagc
aggtecegag ateggeggea cagatecegt tecaagtece caggteatea eegtagteae
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agacacagga gccactcaaa gtctcccgaa aggtctaaga agagccacaa gaagagccgg
agagggaatg agtaatggac tcagtttggt tttagtccac atggcctcct gtggatataa
1020
ggatatctgt atgtggaagg attaagatct cccccaggca gctataagaa tattttagtt
tttttcttat caagtttctc aacctttatt tttaatgaag gaggtgctga gttttgtatc
1140
tttttaatca taatcaacat cagtttttga cccaactaac cttgactgta ttcaaactta
tgagagtata aaggatctgg aggttgggga tatgactgac aaggaaaggc tgtggccacc
1260
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1297
<210> 1758
<211> 312
<212> PRT
<213> Homo sapiens
<400> 1758
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Pro Gln Tyr Leu Val Glu Lys Ile Ile Arg Thr Arg Ile Tyr Glu Ser
                                 25
                                                     30
            20
Lys Tyr Trp Lys Glu Glu Cys Phe Gly Leu Thr Ala Glu Leu Val Val
                             40
        35
Asp Lys Ala Met Glu Leu Arg Phe Val Gly Gly Val Tyr Gly Gly Asn
Ile Lys Pro Thr Pro Phe Leu Cys Leu Thr Leu Lys Met Leu Gln Ile
                                         75
Gln Pro Glu Lys Asp Ile Ile Val Glu Phe Ile Lys Asn Glu Asp Phe
                                     90
Lys Tyr Val Arg Met Leu Gly Ala Leu Tyr Met Arg Leu Thr Gly Thr
                                                     110
                                 105
            100
Ala Ile Asp Cys Tyr Lys Tyr Leu Glu Pro Leu Tyr Asn Asp Tyr Arg
                                                 125
                             120
        115
Lys Ile Lys Ser Gln Asn Arg Asn Gly Glu Phe Glu Leu Met His Val
                                             140
                         135
Asp Glu Phe Ile Asp Glu Leu Leu His Ser Glu Arg Val Cys Asp Ile
```

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155
                  150
145
Ile Leu Pro Arg Leu Gln Lys Arg Tyr Val Leu Glu Glu Ala Glu Gln
             165 170
Leu Glu Pro Arg Val Ser Ala Leu Glu Glu Asp Met Asp Asp Val Glu
                       185
           180
Ser Ser Glu Glu Glu Glu Glu Asp Glu Lys Leu Glu Arg Val Pro
                                             205
                        200
       195
Ser Pro Asp His Arg Arg Arg Ser Tyr Arg Asp Leu Asp Lys Pro Arg
                                        220
                      215
Arg Ser Pro Thr Leu Arg Tyr Arg Arg Ser Arg Ser Pro Arg
                                     235
                 230
225
Arg Arg Ser Arg Ser Pro Lys Arg Arg Ser Pro Ser Pro Arg Arg Glu
                                  250
              245
Arg His Arg Ser Lys Ser Pro Arg Arg His Arg Ser Arg Ser Arg Asp
                                                 270
                             265
           260
Arg Arg His Arg Ser Arg Ser Lys Ser Pro Gly His His Arg Ser His
                                          285
                        280
       275
Arg His Arg Ser His Ser Lys Ser Pro Glu Arg Ser Lys Lys Ser His
                                          300
                   295
   290
Lys Lys Ser Arg Arg Gly Asn Glu
305
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<211> 324
<212> DNA
<213> Homo sapiens
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gtgatgaagg accgaaagct gacgtgggaa tactgtgaca tgtccccatg ctccacctgt
ggcctgaggc agtgcaaacg gcctcagttt agaactaaag gaggactcta cacagacatc
acctcacacc cttggcagge tgccatcttt gtcagcaaca agaggtctcc tggagagaga
 tteetttgtg gaggggtget gate
324
 <210> 1760
 <211> 108
 <212> PRT
 <213> Homo sapiens
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 Asn Ser Ile Val Leu Met Gly Lys Ser Tyr Thr Ala Trp Arg Thr Asn
                                   10
                5
 Ser Gln Ala Leu Gly Leu Gly Arg His Asn Tyr Cys Arg Asn Pro Asp
                                                  30
                               25
            20
 Gly Asp Ala Arg Pro Trp Cys His Val Met Lys Asp Arg Lys Leu Thr
                                              45
                           40
 Trp Glu Tyr Cys Asp Met Ser Pro Cys Ser Thr Cys Gly Leu Arg Gln
```

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Cys Lys Arg Pro Gln Phe Arg Thr Lys Gly Gly Leu Tyr Thr Asp Ile
               70
                                 75
Thr Ser His Pro Trp Gln Ala Ala Ile Phe Val Ser Asn Lys Arg Ser
                                  90
Pro Gly Glu Arg Phe Leu Cys Gly Gly Val Leu Ile
                              105
           100
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<211> 351
<212> DNA
<213> Homo sapiens
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agecatteat tgtaggagag gaggtagaag gaaatgetgt ttgtegatgg ttetttteca
180
gagaggaaga gaggagaaag gaagagcggg gagcaggtgg ggagcccgca gtaagacccc
acagtggggc caggtggtct tgcaccctgt attcccactt tggctggggc agcccagagt
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ccaggecage aggtaatgee ccagecatge ccacteggte etattggate e
<210> 1762
<211> 109
<212> PRT
<213> Homo sapiens
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Met Ala Gly Ala Leu Pro Ala Gly Leu Asp Ser Gly Leu Pro Gln Pro
                               10
Lys Trp Glu Tyr Arg Val Gln Asp His Leu Ala Pro Leu Trp Gly Leu
          20
                              25
                                                30
Thr Ala Gly Ser Pro Pro Ala Pro Arg Ser Ser Phe Leu Leu Ser Ser
       35
                         40
                                             45
Ser Leu Glu Lys Asn His Arg Gln Thr Ala Phe Pro Ser Thr Ser Ser
                      55
                                        60
Pro Thr Met Asn Gly Cys Leu Tyr Ile Phe Arg Gly Cys Ser Pro Thr
                                      75
                   70
Pro Phe Pro Ser Pro Val Asp Phe Tyr Phe Tyr Phe Phe Gly Ile Glu
                                 90
              85
Ser Arg Ser Val Thr Glu Val Val Val Ser Arg Asp Arg
          100
                               105
<210> 1763
<211> 356
<212> DNA
<213> Homo sapiens
<400> 1763
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acteagagte ttttcaaaga tgacgtcage acatttccat tgattgctgc cagacettte
accatcccct acctgacage tettetteeg tetgaactgg agatgeaaca aatggaagag
acagatteet eggageagga tgaacagaca gacacagaga acettgetet teatateage
atggaggatt ctggagccga gaaagagaac acetetgtee tgcagcagaa cccctccttg
300
tegggtagee ggaatgggga ggagaacate ategataace ettatetgeg aceggt
356
<210> 1764
<211> 118
<212> PRT
 <213> Homo sapiens
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Ala Arg Arg Gly Arg Asp Val Glu Arg Ala Leu Thr Arg Phe Met Ala
                                    10
Lys Thr Gly Glu Thr Gln Ser Leu Phe Lys Asp Asp Val Ser Thr Phe
                                 25
            20
 Pro Leu Ile Ala Ala Arg Pro Phe Thr Ile Pro Tyr Leu Thr Ala Leu
                                                 45
                             40
        35
Leu Pro Ser Glu Leu Glu Met Gln Gln Met Glu Glu Thr Asp Ser Ser
                                             60
                         55
 Glu Gln Asp Glu Gln Thr Asp Thr Glu Asn Leu Ala Leu His Ile Ser
                     70
 65
 Met Glu Asp Ser Gly Ala Glu Lys Glu Asn Thr Ser Val Leu Gln Gln
                                     90
                 85
 Asn Pro Ser Leu Ser Gly Ser Arg Asn Gly Glu Glu Asn Ile Ile Asp
                                 105
 Asn Pro Tyr Leu Arg Pro
         115
 <210> 1765
 <211> 357
 <212> DNA
 <213> Homo sapiens
 <400> 1765
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 gtgccggtct ggcgctctgg gccatgtcga gtgcgacgga ggccaatcag gcggaaattg
 cecaggecag gecaggeatt attgeggegg egegeggtgt egtggatgte gagggeggee
 tgctgcggct ctccacccag cgcgacgggg tgattcagga tgtgccggtg aaggaaggac
 agogggtcaa agooggogat atcotogoog ogotogacaa togooggaa otgatog
 357
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<210> 1766
<211> 98
<212> PRT
<213> Homo sapiens
<400> 1766
Met Thr Met Phe Ser Arg Thr Ser Leu Gln Tyr Ala Ile Val Leu Ala
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1
                5
Ala Leu Gly Gly Ala Gly Leu Ala Leu Trp Ala Met Ser Ser Ala Thr
                               25
Glu Ala Asn Gln Ala Glu Ile Ala Gln Ala Arg Pro Gly Ile Ile Ala
                           40
Ala Ala Arg Gly Val Val Asp Val Glu Gly Gly Leu Leu Arg Leu Ser
                                            60
Thr Gln Arg Asp Gly Val Ile Gln Asp Val Pro Val Lys Glu Gly Gln
                                       75
                    70
Arg Val Lys Ala Gly Asp Ile Leu Ala Ala Leu Asp Asn Arg Glu
                                   90
                85
Leu Ile
<210> 1767
<211> 297
<212> DNA
<213> Homo sapiens
<400> 1767
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coggocaaca cgccaggctg cttgacgccg ccagccaacc cgacgaacgc cccaccaaga
acgageeega gecateeeeg gecaateaac gecagaegta tggeeacaac gagtgegaeg
agggacaaac ccacctggag teegtegttg tgcatgeece ccaccaeget caacgtegte
aatggacagc acaccgccag ccagagggca tgatccggat cggttccggc gtagcgn
297
 <210> 1768
 <211> 73
 <212> PRT
 <213> Homo sapiens
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Met Pro Thr Pro Ala Asn Thr Pro Gly Cys Leu Thr Pro Pro Ala Asn
                                   10
                 5
 Pro Thr Asn Ala Pro Pro Arg Thr Ser Pro Ser His Pro Arg Pro Ile
                                                     30
                                25
           2.0
 Asn Ala Arg Arg Met Ala Thr Thr Ser Ala Thr Arg Asp Lys Pro Thr
                                                 45
                         40
       35
 Trp Ser Pro Ser Leu Cys Met Pro Pro Thr Thr Leu Asn Val Val Asn
                                         <sub>.</sub> 60
                         55
    50
 Gly Gln His Thr Ala Ser Gln Arg Ala
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70
65
<210> 1769
<211> 474
<212> DNA
<213> Homo sapiens
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cagggtcatg ccgttcgtgg ccctgccatt gaggtgacga aagggtcagt tagcgtcgag
accepttgaga tectecatae teccegegace aegeategat gegetegeegt ccaggeattg
ccgaagtccg atagagctga gctggcggtg gcgaccctca ccgagatggg agttcacgaa
atcotegeet ggcaggetga teggageate gtgcgatgga agggegaeaa gcaageeaag
ggcgtcgcga ggtggcaagc ggctgcccgt gaggccacca aacagtctcg acgttttctt
gtgccacagg tagaactagc gcaaacccgt gaagttgtta agcggatttg caatgcccag
geegeetacg ttttgcacga gteggeeagt gaacegetgg tgcatcagga gete
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 <210> 1770
 <211> 158
 <212> PRT
 <213> Homo sapiens
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 His His Ala Gly Ser Val Arg Arg Ile Arg Val Gly Glu Ser Val Leu
                          10
 Val Thr Asp Gly Gln Gly His Ala Val Arg Gly Pro Ala Ile Glu Val
                                 25
             20
 Thr Lys Gly Ser Val Ser Val Glu Thr Val Glu Ile Leu His Thr Pro
                                                45
                          40
         35
 Ala Thr Thr His Arg Trp Val Ala Val Gln Ala Leu Pro Lys Ser Asp
                                            60
                         55
  Arg Ala Glu Leu Ala Val Ala Thr Leu Thr Glu Met Gly Val His Glu
                                        75
                     70
  65
  Ile Leu Ala Trp Gln Ala Asp Arg Ser Ile Val Arg Trp Lys Gly Asp
                                    90
                 85
  Lys Gln Ala Lys Gly Val Ala Arg Trp Gln Ala Ala Arg Glu Ala
                                           110
                                105
             100
  Thr Lys Gln Ser Arg Arg Phe Leu Val Pro Gln Val Glu Leu Ala Gln
                            120
         115
  Thr Arg Glu Val Val Lys Arg Ile Cys Asn Ala Gln Ala Ala Tyr Val
                        135
                                            140
  Leu His Glu Ser Ala Ser Glu Pro Leu Val His Gln Glu Leu
                                        155
                     150
  <210> 1771
   <211> 287
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<212> DNA
<213> Homo sapiens
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taataacagc gggtgtcgca gaggaagaag cctgggagaa tggaagtcag ggaaggagag
120
caacaggett eteactetgt gecatgagea tgtgetagee atggagaeae tetgeatgtt
180
acctagaact gctgattcat tgctctggaa ttattcagct attcaagacc cagtgaaata
cagcaagcag ctttcattca tacacacaca tgtgcatcca tgtgcac
287
<210> 1772
<211> 93
<212> PRT
<213> Homo sapiens
<400> 1772
Met Gly Asn Ser Asn Thr Cys Lys Glu Leu Ser Leu Gln Val Tyr Ser
                                                        15
                                    10
1
                5
Asp Ile Asn Asn Ser Gly Cys Arg Arg Gly Arg Ser Leu Gly Glu Trp
                                                    30
                                25
            20
Lys Ser Gly Lys Glu Ser Asn Arg Leu Leu Thr Leu Cys His Glu His
                            40
        35
Val Leu Ala Met Glu Thr Leu Cys Met Leu Pro Arg Thr Ala Asp Ser
                        55
Leu Leu Trp Asn Tyr Ser Ala Ile Gln Asp Pro Val Lys Tyr Ser Lys
Gln Leu Ser Phe Ile His Thr His Val His Pro Cys Ala
                85
<210> 1773
<211> 393
<212> DNA
<213> Homo sapiens
<400> 1773
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cgtccggatt ctctggtatt gtgggaagee caattcggeg atttcaccaa cggtgeecag
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240
gtgctgctgc tgccgcacgg ttacgaaggt caggggcctg atcactcgtc ggcccgtctg
gagogottoc toaatotatg cagtgaagao gotttggcog totgcoagoo otcgaccoog
360
gcaagetaca gccatttatt gcgtcagcac gcg
393
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<211> 131
<212> PRT
<213> Homo sapiens
<400> 1774
Thr Gly Glu Phe Tyr Val Pro Val Asn His Leu Gly Gly Glu Gln Ala
1
                                   10
His Leu Asp Val Phe Asp Ser Pro Leu Asn Glu Tyr Ala Ala Met Gly
                               25
                                                    30
           20
Phe Glu Tyr Gly Tyr Ser Val Ala Arg Pro Asp Ser Leu Val Leu Trp
                            40
                                                45
Glu Ala Gln Phe Gly Asp Phe Thr Asn Gly Ala Gln Thr Ile Ile Asp
                        55
Glu Phe Ile Ala Ser Ala Gly Ser Lys Trp Gly Gln Lys Ser Gly Val
                                        75
Val Leu Leu Pro His Gly Tyr Glu Gly Gln Gly Pro Asp His Ser
                                   90
               85
Ser Ala Arg Leu Glu Arg Phe Leu Asn Leu Cys Ser Glu Asp Ala Leu
                                                    110
                               105
           100
Ala Val Cys Gln Pro Ser Thr Pro Ala Ser Tyr Ser His Leu Leu Arg
                          120
       115
Gln His Ala
   130
<210> 1775
<211> 369
<212> DNA
<213> Homo sapiens
<400> 1775
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gecactetea gagaceeece geetteettg ecaceeecae eccagagggg aagetggage
180
tgggaggctg cagacccagg ccaaggtgtg gccagggctg gctttcttgg gaggctttga
gcatectget teetggeeae ceagetetgg ggetgetgte aactettgat ttgtagacat
cactecages tetggeetgt caccetgaas etcccccatg tetgtgtett ttctcactgg
aacaccggt
369
<210> 1776
<211> 59
<212> PRT
<213> Homo sapiens
<400> 1776
Arg Glu Gly Ile Ala Arg Glu Gly Trp Gly Gly Pro Ala Ser Met Gln
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Pro Cys Gly Arg Ala Thr Leu Arg Asp Pro Pro Pro Ser Leu Pro Pro
           20
                                25
Pro Pro Gln Arg Gly Ser Trp Ser Trp Glu Ala Ala Asp Pro Gly Gln
                            40
Gly Val Ala Arg Ala Gly Phe Leu Gly Arg Leu
<210> 1777
<211> 370
<212> DNA
<213> Homo sapiens
<400> 1777
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ttaqcaqcac cactqtccqq taaactaaca gataaacaag gaccgacacg ggtcacgcag
ctgggtgctg cettagttgt egtetettte geatetatgt tgttattgee ttactteagt
atcagtaccc aagttataat gattattgtt gctaccatag tgtttgactt tggtgttcag
geggeactta ttgeteatea aacettagtg tataacattg actetacege tegtggaege
360
cttaacgcgt
370
<210> 1778
<211> 123
<212> PRT
<213> Homo sapiens
<400> 1778
Ser Phe Leu Ser Leu Ser Phe Ser Ala Phe Trp Ser Thr Leu Ala Val
                                   10
Met Leu His Gln Glu Tyr Gly Phe Gly Ser Ala Thr Ala Gly Phe Phe
                                                   30
                               25
           20
Gly Leu Ala Gly Ala Ala Gly Ala Leu Ala Ala Pro Leu Ser Gly Lys
                            40
Leu Thr Asp Lys Gln Gly Pro Thr Arg Val Thr Gln Leu Gly Ala Ala
                        55
                                           60
Leu Val Val Val Ser Phe Ala Ser Met Leu Leu Leu Pro Tyr Phe Ser
                                       75
Ile Ser Thr Gln Val Ile Met Ile Ile Val Ala Thr Ile Val Phe Asp
                                   90
               85
Phe Gly Val Gln Ala Ala Leu Ile Ala His Gln Thr Leu Val Tyr Asn
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                                                   110
           100
Ile Asp Ser Thr Ala Arg Gly Arg Leu Asn Ala
       115
                            120
<210> 1779
<211> 345
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1391

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<213> Homo sapiens
<400> 1779
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60
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120
180
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<210> 1780
<211> 55
<212> PRT
<213> Homo sapiens
<400> 1780
Pro Cys Val Cys Ile Cys Ser Cys Val Met Val Cys Ile Cys Val Tyr
                                    10
 1
Val Xaa Ile Cys Ile His Val Cys Tyr Gly Val Tyr Ile Cys Ile Tyr
                                 25
Val Cys Val Tyr Ile Cys Ile Trp Val Cys Val Cys Met Cys Val Trp
                             40
        35
Val Cys Ile Cys Val Tyr Met
     50
 <210> 1781
 <211> 349
 <212> DNA
 <213> Homo sapiens
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 cccagtgcac aagagcccag ttatctttgc cagtggtgcg ctccccagac acgaaagcac
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 aagacatggg agggtgatgc tattettata ttgcatggaa ataaaactae ttgttegeta
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 349
 <210> 1782
 <211> 107
 <212> PRT
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<213> Homo sapiens

<400> 1782

900

Met Ala Thr Phe Ser Ser Glu Gln Ala Glu Glu Lys Leu Leu Ser Lys 10 1 Phe His Thr Pro Val Lys Arg Lys His Asp Asp Thr Arg Ser Ser Asp 25 20 Val Asn Thr Thr Gln Thr Gly Ser Ser Ala Thr Pro Ile Thr Pro Val 40 Pro Leu Leu Pro Ser Ala Gln Glu Pro Ser Tyr Leu Cys Gln Trp Cys 55 Ala Pro Gln Thr Arg Lys His Lys Thr Trp Glu Gly Asp Ala Ile Leu 75 65 Ile Leu His Gly Asn Lys Thr Thr Cys Ser Leu Arg Ser Ala His Asp 90 85 Gly Ser Met Leu Val Thr Asn Ala Ala Phe Arg 105 100 <210> 1783 <211> 1829 <212> DNA <213> Homo sapiens <400> 1783 gtgcacgact tcgacgccag cctctcgggc atcgggcagg aactgggcgc cggcgcttac agcatgagtg atgtcttggc attgcccatt ttcaagcagg aagattccag ccttccattg gatggtgaaa cagagcaccc accetttcag tatgtgatgt gtgctgcaac gtcaccagca 180 gtaaaactgc atgatgaaac gcttacttat ttgaaccaag gtcagtcata tgaaattcgg 240 atgetggata ateggaaaat gggtgatatg cetgagatea atggaaaatt agtaaagage atcataaggg ttgtatteca tgacagacgg ctacaataca cagagcatca gcaacttgaa 360 ggatggaagt ggaatcgccc aggagacaga cttcttgatt tagatattcc aatgtctgtg ggaataattg acacaaggac gaatccaggc cagttaaatg cggttgaatt tctgtgggac ccagcaaaac gcacctctgc tttcattcag gtacactgca tcagcacaga atttactcca cggaagcacg gaggtgaaaa gggagtgccc tttaggatcc aggttgacac ctttaagcag aatgaaaatg gagaatacac agatcatcta cactcagcta gctgccaaat caaagttttt aagcctaaag gtgcagacag gaaacaaaaa actgaccgag agaagatgga gaagagaaca geteatgaaa aagaaaagta teageegtee tatgataeea eaateeteae agagatgagg cttgagccta taattgaaga tgcagttgaa catgagcaga aanaagtcca gcaagcggac tttgccgcag actacggtga ttctctggca aagcgaggça gttgttctcc gtggcccgat

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getteacaga cetetggtga acaaatteag eetteageta egateeagga aacacageaa
1080
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cgggagcagc caagcagcac agtgctgcaa gggcagcagc aagctgcaag cagtgcaagc
1320
gagaatggca gtggggcacc ctatgtttat catgcaatct acttggaaga aatgattgcc
tragaagttg ctrgaaaact tgrgctggtg tttaatatre ctrtccacca aattaatrag
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atttgttttt ccttttcaga ctggtattta cttttataca tgtaattgta gaactgtaga
1560
aaaattotgt gacototttt gaaaataott atgagaatca ttttcagaga gttgggaato
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actttggaag aacttataac caagagtttc aggcatccta gtgataatat ggaatacaag
ccaaggaaaa ctggcttagc ctcccccag ccctttagga tgcagccaat cactggggca
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ctctagggat agtggcaggc tttggccctt tttatgaggt gagtcactgg atgtgttttc
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 <211> 514
 <212> PRT
 <213> Homo sapiens
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 Ala Gly Ala Tyr Ser Met Ser Asp Val Leu Ala Leu Pro Ile Phe Lys
                                                   30
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             20
 Gln Glu Asp Ser Ser Leu Pro Leu Asp Gly Glu Thr Glu His Pro Pro
                                               45
                            40
         35
 Phe Gln Tyr Val Met Cys Ala Ala Thr Ser Pro Ala Val Lys Leu His
                                            60
                        55
     50
 Asp Glu Thr Leu Thr Tyr Leu Asn Gln Gly Gln Ser Tyr Glu Ile Arg
                                        75
                     70
 65
 Met Leu Asp Asn Arg Lys Met Gly Asp Met Pro Glu Ile Asn Gly Lys
                                    90
                 85
 Leu Val Lys Ser Ile Ile Arg Val Val Phe His Asp Arg Arg Leu Gln
             100
                                105
  Tyr Thr Glu His Gln Gln Leu Glu Gly Trp Lys Trp Asn Arg Pro Gly
```

							120					125			
_	•	115	• • • • •	2	T	N	120	Dro	Mat	Car	Va1		Ile	Tle	Asp
_	130					135					140				
Thr	Arg	Thr	Asn	Pro	Gly	Gln	Leu	Asn	Ala	Val	Glu	Phe	Leu	Trp	Asp
145					150					155					160
Pro	Ala	Lys	Arg	Thr	Ser	Ala	Phe	Ile	Gln	Val	His	Cys	Ile	Ser	Thr
				165					170				_	175	_
Glu	Phe	Thr	Pro	Arg	Lys	His	Gly	Gly	Glu	Lys	Gly	Vai	Pro	Pne	Arg
			180				_	185		_		-1	190	mb	7
Ile	Gln		Asp	Thr	Phe	Lys		Asn	Glu	Asn	GIA	205	Tyr	Thr	Asp
		195			_	_	200	-1.		11-1	nha		Dro	Lvc	Gl v
His		His	Ser	Ala	Ser		Gin	TIE	гÀг	vaı	220	гуъ	Pro	цуз	GLY
	210	_	_		•	215		7	C1	T 1/0		Glu	tive	Δνα	Thr
	Asp	Arg	Lys	GIN		Thr	Asp	Arg	GIU	235	Mec	Gru	Lys	9	240
225	*** -	~1		G1	230	T1.00	Cln	Dro	Car		Δsn	Thr	Thr	Ile	
Ala	HIS	GIU	Lys	245	ьуъ	IÀT	GIII	FIU	250	- 7 -	nop			255	
Th.	C1	Mot	7.50		Gln	Pro	Tle	TIE		Asp	Ala	Val	Glu		Glu
Int	GIU	Mec	260	Leu	Giu	110	110	265					270		
Gl n	Lare	Yaa	Val	Gln	Gln	Ala	Asp		Ala	Ala	Asp	Tyr	Gly	Asp	Ser
GIII	БуЗ	275	141				280				•	285	-	_	
t.eu	Δla	Lvs	Ara	Glv	Ser	Cvs	Ser	Pro	Trp	Pro	Asp	Ala	Pro	Thr	Ala
200	290	-,-	5	1		295			_		300				
Tvr	Val	Asn	Asn	Ser	Pro	Ser	Pro	Ala	Pro	Thr	Phe	Thr	Ser	Pro	Gln
305					310					315					320
Gln	Ser	Thr	Cys	Ser	Val	Pro	Asp	Ser	Asn	Ser	Ser	Ser	Pro	Asn	His
				325					330					335	
Gln	Gly	Asp	Gly	Ala	Ser	Gln	Thr	Ser	Gly	Glu	Gln	Ile	Gln	Pro	Ser
			340					345					350	-,	_
Ala	Thr		Gln	Glu	Thr	Gln		Trp	Leu	Leu	Lys	Asn	Arg	Pne	ser
		355					360		_			365	7	T 011	tua
Ser		Thr	Arg	Leu	Phe		Asn	Phe	Ser	GIY	380	Asp	Leu	Leu	гуѕ
	370			•	•	375	a1	T3.0	Cura	Gl.v		בומ	λen	Glv	Tle
	Thr	Lys	GIU	Asp	390	vaı	GIII	116	Cys	395	ALG	ALG	Asp	OL,	400
385	•			C . ~		Lvc	car	Ara	Ser			Pro	Arg	Leu	
Arg	Leu	TYE	ASII	405	neu	БАЗ	261	-rg	410	V u	**** 5		5	415	
Tla	Tur	Val	Cvs		Glu	Gln	Pro	Ser		Thr	Val	Leu	Gln	Gly	Gln
116	1 7 1	Vai	420	9	020			425					430	•	
Gln	Gln	Ala	Ala	Ser	Ser	Ala	Ser	Glu	Asn	Gly	Ser	Gly	Ala	Pro	Tyr
	0	435					440			_		445			
Val	Tvr	His	Ala	Ile	Tyr	Leu	Glu	Glu	Met	Ile	Ala	Ser	Glu	Val	Ala
	450					455					460				
Arg	Lys	Leu	Ala	Leu	Val	Phe	Asn	Ile	Pro	Leu	His	Gln	Ile	Asn	Gln
465					470					475					480
Val	Tyr	Arg	Gln	Gly	Pro	Thr	Gly	Ile	His	Ile	Leu	Val	Ser	Asp	Gln
				485					490			_	_	495	-
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Tyr	Met														

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acactcacaa tgcctgcctc catgagcatg gagaggagga tcatattgaa ggcttttggt
gctgaacttg tccttactga cccactcttg ggaatgaaag gagctgtcaa gaaagcggaa
240
gagatacaag caaagacacc caactcgtac atcettcaac aatttgaaaa tecagetaac
ccaaagattc actatgagac tactgggcct gaaatctgga aagctacagc aggaaaaatt
gatggccttg tatctggtat c
381
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<211> 127
<212> PRT
<213> Homo sapiens
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Ile Thr Asp Ala Glu Glu Lys Gly Leu Ile Thr Pro Gly Val Ser Val
Leu Ile Glu Pro Thr Ser Gly Asn Thr Gly Ile Gly Leu Ala Phe Met
                                                    30
                                25
            20
Ala Ala Ala Lys Gly Tyr Lys Leu Thr Leu Thr Met Pro Ala Ser Met
                            40
        35
Ser Met Glu Arg Arg Ile Ile Leu Lys Ala Phe Gly Ala Glu Leu Val
                                            60
                        55
    50
Leu Thr Asp Pro Leu Leu Gly Met Lys Gly Ala Val Lys Lys Ala Glu
                    70
                                        75
Glu Ile Gln Ala Lys Thr Pro Asn Ser Tyr Ile Leu Gln Gln Phe Glu
                85
Asn Pro Ala Asn Pro Lys Ile His Tyr Glu Thr Thr Gly Pro Glu Ile
                                                    110
            100
                                105
Trp Lys Ala Thr Ala Gly Lys Ile Asp Gly Leu Val Ser Gly Ile
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<210> 1787
<211> 294
<212> DNA
<213> Homo sapiens
<400> 1787
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agggtcacct aacaaggaga tgagaacaaa ctttaaatct atctctctaa ggaatttgga
cttcgggttt ttaaggttta gaatgggcca aaacatggac attattgatt ggtcaaagag
180
```

```
tacagggtca tggaacctgg agatgaaaaa gccatattct catgctgatc ctgttcctct
gtggaaggtc ttcaaattgg ttgccggaat aaaagatctg tcaaacatct tagg
294
<210> 1788
<211> 91
<212> PRT
<213> Homo sapiens
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Met Pro Arg His Gln Val Ala Ala Glu Lys Asp Leu Ile Val Gly Ser
                                    10
1
                5
Pro Asn Lys Glu Met Arg Thr Asn Phe Lys Ser Ile Ser Leu Arg Asn
                                                     3.0
            20
                                25
Leu Asp Phe Gly Phe Leu Arg Phe Arg Met Gly Gln Asn Met Asp Ile
                            40
       35
Ile Asp Trp Ser Lys Ser Thr Gly Ser Trp Asn Leu Glu Met Lys Lys
                        55
                                            60
Pro Tyr Ser His Ala Asp Pro Val Pro Leu Trp Lys Val Phe Lys Leu
                    70
Val Ala Gly Ile Lys Asp Leu Ser Asn Ile Leu
                85
<210> 1789
<211> 353
<212> DNA
<213> Homo sapiens
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gcaggcacac atgcacacac gcgcgcgcac acgcacacac acccccagcc cggaccggcc
180
gacctgctcc ccggggtctc tcccgcaggc aggtctcctc gccgagtctc cgaaaagggg
240
cggtcgtggc ggccctggcg cccagctggg caacgcttcg tggtatctca ccgcttctct
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353
<210> 1790
<211> 105
<212> PRT
<213> Homo sapiens
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Met His Thr Pro Ser Thr Tyr Ser His Thr Gln Thr Cys His Thr Pro
                                    10
Pro Ser Pro His Thr Arg Thr Arg Pro Pro Pro Leu Ala Gly Thr His
            20
                                25
Ala His Thr Arg Ala His Thr His Thr His Pro Gln Pro Gly Pro Ala
```

```
Asp Leu Leu Pro Gly Val Ser Pro Ala Gly Arg Ser Pro Arg Arg Val
                       55
Ser Glu Lys Gly Arg Ser Trp Arg Pro Trp Arg Pro Ala Gly Gln Arg
Phe Val Val Ser His Arg Phe Ser Leu Leu Cys Pro Ala Pro Arg Leu
                85
                                   90
Lys Ile Arg Ile Phe Ser Pro Trp Arg
           100
<210> 1791
<211> 355
<212> DNA
<213> Homo sapiens
<400> 1791
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acccccaga aacccactca tggattctcc cgagtctttg gacctggctc agacaccctt
getttggate aagecaatge atgtateece taacacacce atgetttatg tggteeetge
180
coetcoetge teaggggact gettgttaac tteattgggt tggggacata tatattatag
gagagagaca gagaaaaaga aagagaggaa atgttattct ccttgtctgt atctgtatct
ccactccgat toccattocc totgotgotc toctototct cotcocttca cgcgt
355
<210> 1792
<211> 108
<212> PRT
<213> Homo sapiens
<400> 1792
Met Leu Phe Phe Pro Ile Leu Val Tyr Arg Pro Pro Arg Asn Pro Leu
                                    10
Met Asp Ser Pro Glu Ser Leu Asp Leu Ala Gln Thr Pro Leu Leu Trp
                                25
           20
Ile Lys Pro Met His Val Ser Pro Asn Thr Pro Met Leu Tyr Val Val
                                                45
                            40
Pro Ala Pro Pro Cys Ser Gly Asp Cys Leu Leu Thr Ser Leu Gly Trp
                                            60
                        55
   50
Gly His Ile Tyr Tyr Arg Arg Glu Thr Glu Lys Lys Glu Arg Lys
                                        75
                    70
Cys Tyr Ser Pro Cys Leu Tyr Leu Tyr Leu His Ser Asp Ser His Ser
                                    90
                85
Leu Cys Cys Ser Pro Leu Ser Pro Pro Phe Thr Arg
            100
                                105
<210> 1793
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<212> DNA
<213> Homo sapiens
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<400> 1793
tgggttccag cccgtagatg accttggcct gggaggcctt ccgaaggcca cacccatatc
cacccctcg gagetectcg ettaccagte geccaaagag ettgteecce cageagecag
agtcagccag accettagca aacaccatag gggtcatete aatetettet ecaactteae
cttcttctct ggagatgaat cctgacaaca cctcagggct gaggcagaag tcggtggagg
ccgagccgtg ctcattgtgg atggtgcacc gatacacacc gcagtctacg ggggaggcct
300
gcacgatggc caaggccgcc ggcccctcat cccctgcgct cctgcccacc tcgcccactg
ggcgctgatc cttggcccat gtcaagactg agtcactaag aatgttgaaa aactggcacc
420
acagetteag getaceggag geateaggaa actgeteeae eegaatette eggateaeet
gtggggcttt cagcaggtct ttggctttcc
510
<210> 1794
<211> 116
<212> PRT
<213> Homo sapiens
<400> 1794
Met Thr Leu Ala Trp Glu Ala Phe Arg Arg Pro His Pro Tyr Pro Pro
                                    10
                5
Pro Arg Ser Ser Ser Leu Thr Ser Arg Pro Lys Ser Leu Ser Pro Gln
                                25
           20
Gln Pro Glu Ser Ala Arg Pro Leu Ala Asn Thr Ile Gly Val Ile Ser
                                                45
       35
                           40
Ile Ser Ser Pro Thr Ser Pro Ser Ser Leu Glu Met Asn Pro Asp Asn
Thr Ser Gly Leu Arg Gln Lys Ser Val Glu Ala Glu Pro Cys Ser Leu
                                       75
                   70
Trp Met Val His Arg Tyr Thr Pro Gln Ser Thr Gly Glu Ala Cys Thr
                                                        95
                                    90
Met Ala Lys Ala Ala Gly Pro Ser Ser Pro Ala Leu Leu Pro Thr Ser
                                105
           100
Pro Thr Gly Arg
       115
<210> 1795
<211> 386
<212> DNA
<213> Homo sapiens
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ctatgctctg agtcacttct ccaagcattc ctttctgttc ttccttccct gggctgatca
tttcaagaag tcctacattc cagaaaactt gagaggtgct tcttctctgg aagccccttt
120
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```
tettttetgt gageteaggg ageattetae ataceteage tgtgtetget atettttget
taattatcaa tettteeata taaacagtaa aggaccacag tttatteate agatteecea
tccaaacctg cacctgcata cataaacgca ctggataaat gtaccgcagt agacagaggc
tctccaggtt gagagctcca tgagggcacc aatttttgtc tgtttagctg tgtcctcaaa
gcaaggaagg gttgatccgg tctaga
386
<210> 1796
<211> 86
<212> PRT
<213> Homo sapiens
<400> 1796
Met Gln Val Gln Val Trp Met Gly Asn Leu Met Asn Lys Leu Trp Ser
Phe Thr Val Tyr Met Glu Arg Leu Ile Ile Lys Gln Lys Ile Ala Asp
            20
                                25
Thr Ala Glu Val Cys Arg Met Leu Pro Glu Leu Thr Glu Lys Lys Arg
                            40
       35
Gly Phe Gln Arg Arg Ser Thr Ser Gln Val Phe Trp Asn Val Gly Leu
                                            60
                       55
Leu Glu Met Ile Ser Pro Gly Lys Glu Glu Gln Lys Gly Met Leu Gly
65
                                        75
Glu Val Thr Gln Ser Ile
                85
<210> 1797
<211> 348
<212> DNA
<213> Homo sapiens
<400> 1797
aagetteact atgttgeeca tteeatggge ggegtgetgg tgegtgaeet getggeggae
eggaatttge egatgteatt gateaggtea tetgtetggg etegeegeag eagggetege
120
gtgccgctaa tttgttggcg ccatttgctg gcggcgcatc cgtcaaatgg tgtatcacag
cgactatgtg atgccgettg cgcccacgcc cggcagcgcg cgttggagcg ccatcaactc
acagatggac aacctggtgt tgccggtgac ctcggcaatt ttaccgggaa tgacccatgt
ggcggtggat tacctggggc attgttcgtt attgtacagc ccacgcgt
348
<210> 1798
<211> 108
<212> PRT
<213> Homo sapiens
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```
<400> 1798
Met Gly Gly Val Leu Val Arg Asp Leu Leu Ala Asp Arg Asn Leu Pro
Met Ser Leu Ile Arg Ser Ser Val Trp Ala Arg Arg Ser Arg Ala Arg
                                25
                                                    30
Val Pro Leu Ile Cys Trp Arg His Leu Leu Ala Ala His Pro Ser Asn
                                                45
                            40
Gly Val Ser Gln Arg Leu Cys Asp Ala Ala Cys Ala His Ala Arg Gln
                        55
Arg Ala Leu Glu Arg His Gln Leu Thr Asp Gly Gln Pro Gly Val Ala
                                        75
                    70
Gly Asp Leu Gly Asn Phe Thr Gly Asn Asp Pro Cys Gly Gly Leu
                85
                                    90
Pro Gly Ala Leu Phe Val Ile Val Gln Pro Thr Arg
                                105
           100
<210> 1799
<211> 366
<212> DNA
<213> Homo sapiens
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aataccgtca tgtattacgc gcccaaggtg ttggagttcg caggaatgag cacccaggcg
togattattt cagaggtggc taatggagtc atgtctgtta ttggtgccgc tgcaggcttg
180
tggctcatcg aacggtttga tcgtcgtcac ctgcttatct tcgatgtcac ggcggtcggt
gtgtgtctcc ttggtattgc ggctactttc gggctggcaa ttgctcctca tgtgggtcaa
ggggtaccga agtgggcgcc tattctcgtg ctcgtcctga tgagtatctt catgcttatc
360
gtgcac
366
<210> 1800
<211> 122
<212> PRT
<213> Homo sapiens
<400> 1800
Thr Arg Arg Leu Leu Val Gly Ile Phe Leu Ala Val Val Asn Gln
                                    10
1
Thr Thr Gly Val Asn Thr Val Met Tyr Tyr Ala Pro Lys Val Leu Glu
                                25
Phe Ala Gly Met Ser Thr Gln Ala Ser Ile Ile Ser Glu Val Ala Asn
       35
                           40
Gly Val Met Ser Val Ile Gly Ala Ala Ala Gly Leu Trp Leu Ile Glu
Arg Phe Asp Arg Arg His Leu Leu Ile Phe Asp Val Thr Ala Val Gly
                   70
Val Cys Leu Leu Gly Ile Ala Ala Thr Phe Gly Leu Ala Ile Ala Pro
```

```
90
                85
His Val Gly Gln Gly Val Pro Lys Trp Ala Pro Ile Leu Val Leu Val
                                105
           100
Leu Met Ser Ile Phe Met Leu Ile Val His
                           120
       115
<210> 1801
<211> 597
<212> DNA
<213> Homo sapiens
<400> 1801
aattteteet teggtgaeta etteaagaae gaggeeatte agtaegeatg ggagetegte
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cttqqacctq ggtttcaccc tgactatccg gagggcgaca ttgaggcgcg cgaggcgtgg
cgtgctgcgg gtatccctga cgagcagatt cagggtcgct cccttaagga caactactgg
catatggggg tteccggccc cggcggcccg tgctcggaaa tctacatcga tcgtggccca
gcctatggtc ccgacggtgg tccagaagca gatgaggacc gttaccttga gatctggaac
ctcgtattcg agaccgagga tctctcagcg gtgcgcgcta aagatgactt cgacatcgca
ggeccattge geageettaa eategaeact ggtgeeggte tegaaegtat tgeetaeeta
ctccagggcg tcgacaatat gtacgagact gaccaggtat tccctgtcat tgagaaagcg
tccgagatgt cgggcaagcg gtacggcgtt cgccacgacg acgacgtccg actacgc
<210> 1802.
<211> 199
<212> PRT
<213> Homo sapiens
<400> 1802
Asn Phe Ser Phe Gly Asp Tyr Phe Lys Asn Glu Ala Ile Gln Tyr Ala
                                    10
1
Trp Glu Leu Val Thr Lys Pro Ala Glu Gln Gly Gly Leu Gly Phe Asp
            20
                                25
Pro Ala Ser Ile Trp Val Thr Val Leu Gly Pro Gly Phe His Pro Asp
                            40
Tyr Pro Glu Gly Asp Ile Glu Ala Arg Glu Ala Trp Arg Ala Ala Gly
                        55
                                            60
Ile Pro Asp Glu Gln Ile Gln Gly Arg Ser Leu Lys Asp Asn Tyr Trp
His Met Gly Val Pro Gly Pro Gly Pro Cys Ser Glu Ile Tyr Ile
                                    90
Asp Arg Gly Pro Ala Tyr Gly Pro Asp Gly Gly Pro Glu Ala Asp Glu
                                105
                                                    110
Asp Arg Tyr Leu Glu Ile Trp Asn Leu Val Phe Glu Thr Glu Asp Leu
```

```
115
                           120
                                              125
Ser Ala Val Arg Ala Lys Asp Asp Phe Asp Ile Ala Gly Pro Leu Arg
                       135
                                          140
Ser Leu Asn Ile Asp Thr Gly Ala Gly Leu Glu Arg Ile Ala Tyr Leu
                   150
                                       155
Leu Gln Gly Val Asp Asn Met Tyr Glu Thr Asp Gln Val Phe Pro Val
                                  170
               165
Ile Glu Lys Ala Ser Glu Met Ser Gly Lys Arg Tyr Gly Val Arg His
           180
                               185
Asp Asp Asp Val Arg Leu Arg
       195
<210> 1803
<211> 708
<212> DNA
<213> Homo sapiens
<400> 1803
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tategeggeg aggecatega gaagatgteg atggagggte geatgaegat etgeaatatg
tegattgagt ggggageteg egteggeatg gttgettetg atgagaceae etteaeetae
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cgcactctgc gtactgacga cgatgcgacc tttgacgctg agatccatgt ggacgcctcg
360
aatotogooc cottogttac ctggggtacc aaccoggggc agggatoccc cotaggoggt
catggatttg accorgacga gateggttee eggtttgetg acatettteg caataactet
gcgaacaacg gcttgttact ggctcaggtt gatcccaagg tcgtcggaga gttgtgggac
tttgccgagc agcatcctgg tgagcagctc accetetece tegagaateg gacgattaac
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<210> 1804
<211> 236
<212> PRT
<213> Homo sapiens
<400> 1804
Pro Thr Thr Met Ala Val Met Val Asp Gly Glu Val Pro Glu Glu Val
Thr Pro Lys Asp Leu Ile Leu Ala Leu Ile Ser Glu Ile Gly Thr Gly
           20
Gly Gly Gln Gly His Met Val Glu Tyr Arg Gly Glu Ala Ile Glu Lys
```

```
40
Met Ser Met Glu Gly Arg Met Thr Ile Cys Asn Met Ser Ile Glu Trp
Gly Ala Arg Val Gly Met Val Ala Ser Asp Glu Thr Thr Phe Thr Tyr
                                        75
                   70
Leu Lys Asp Arg Pro His Ala Pro Arg Gly Ala Gln Trp Asp Lys Ala
                                    90
                                                        95
               85
Val Ala Tyr Trp Arg Thr Leu Arg Thr Asp Asp Asp Ala Thr Phe Asp
                               105
                                                    110
Ala Glu Ile His Val Asp Ala Ser Asn Leu Ala Pro Phe Val Thr Trp
                                                125
                           120
       115
Gly Thr Asn Pro Gly Gln Gly Ser Pro Leu Gly Gly Val Val Pro Ala
                                            140
                        135
    130
Val Glu Asp Phe Glu Asp Glu Val Ala Arg Ser Ala Ala Phe Gly Val
                                        155
                   150
145
His Gly Phe Asp Pro Asp Glu Ile Gly Ser Arg Phe Ala Asp Ile Phe
                                                        175
                                    170
Arg Asn Asn Ser Ala Asn Asn Gly Leu Leu Leu Ala Gln Val Asp Pro
                                185
            180
Lys Val Val Gly Glu Leu Trp Asp Phe Ala Glu Gln His Pro Gly Glu
                                               205
                            200
       195
Gln Leu Thr Leu Ser Leu Glu Asn Arg Thr Ile Asn Leu Pro Gly Arg
                                            220
                       215
Thr Thr Tyr Pro Phe His Ile Asp Asp Val Thr Arg
                    230
<210> 1805
<211> 833
<212> DNA
<213> Homo sapiens
<400> 1805
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aaggagatct gtggtctggg cctgtcgacc tatttctctg gcccgaaggt caaatggatt
ctogacaacg ttgagggagc cogtgegagg geogaggeeg gegatetget etteggtaac
atggacactt gggtgctgtg gaacctgact ggcggtacta acggtggcgt gcacatcacc
300
gatecgaeca acgegteccg aaccatgete atggaegtee gaaagetgea gtgggaegae
360
tegatgtgeg aggteatggg aattecaaag tecatgette etgagateaa gteeteetee
420
gagatetacg getatggteg caagaacgge etgetgateg atacceegat eteeggeatt
cttggcgatc agcaggccgc cacctttggc caggcttgct tccaaaaggg catggcgaag
aacacgtacg gcaccggctg cttcatgctc atgaacacag gtgaggaggc catcttctcc
gagaacggtc tgctgaccac cgtctgctac aagattggtg accagcccac cgtctatgcc
660
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ctggaaggtt cgatcgccgt cgctggatcg ctggtacagt ggctgcgcga caacctcaag
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geetactttg tgeeggeett etetggeetg ttegegeegt aetggegtee gga
<210> 1806
<211> 277
<212> PRT
<213> Homo sapiens
<400> 1806
Xaa Ala Val Val Trp Asp Lys Asn Thr Gly Glu Pro Val Tyr Asn Ala
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Ile Val Trp Gln Asp Thr Arg Thr Gln Lys Ile Cys Asn Glu Leu Ala
         20
                          25
Gly Asp Lys Gly Ala Asp Arg Tyr Lys Glu Ile Cys Gly Leu Gly Leu
                        40
Ser Thr Tyr Phe Ser Gly Pro Lys Val Lys Trp Ile Leu Asp Asn Val
                                     60
 Š0
                   55
Glu Gly Ala Arg Ala Arg Ala Glu Ala Gly Asp Leu Leu Phe Gly Asn
                          75
Met Asp Thr Trp Val Leu Trp Asn Leu Thr Gly Gly Thr Asn Gly Gly
           85 90
Val His Ile Thr Asp Pro Thr Asn Ala Ser Arg Thr Met Leu Met Asp
                        105 110
Val Arg Lys Leu Gln Trp Asp Asp Ser Met Cys Glu Val Met Gly Ile
                            125
                       120
      115
Pro Lys Ser Met Leu Pro Glu Ile Lys Ser Ser Ser Glu Ile Tyr Gly
                   135
                             140
Tyr Gly Arg Lys Asn Gly Leu Leu Ile Asp Thr Pro Ile Ser Gly Ile
                                  155
       150
Leu Gly Asp Gln Gln Ala Ala Thr Phe Gly Gln Ala Cys Phe Gln Lys
                                       175
            165
                            170
Gly Met Ala Lys Asn Thr Tyr Gly Thr Gly Cys Phe Met Leu Met Asn
        180 185
                                    190
Thr Gly Glu Glu Ala Ile Phe Ser Glu Asn Gly Leu Leu Thr Thr Val
                               205
              200
     195
Cys Tyr Lys Ile Gly Asp Gln Pro Thr Val Tyr Ala Leu Glu Gly Ser
                 215
                                    220
Ile Ala Val Ala Gly Ser Leu Val Gln Trp Leu Arg Asp Asn Leu Lys
225
                230
                                 235
Met Phe Glu Thr Ala Pro Gln Ile Glu Ala Leu Ala Asn Thr Val Glu
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Asp Asn Gly Gly Ala Tyr Phe Val Pro Ala Phe Ser Gly Leu Phe Ala
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Pro Tyr Trp Arg Pro
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<210> 1807
<211> 420
<212> DNA
<213> Homo sapiens
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<400> 1807
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aagcatgegg etgageagae gategeegtg ggttgtteee teattegtte ggegetgggg
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gagacgette tgtaatgggt geatgatggg eeggtggtee atageeatge atagacaete
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420
<210> 1808
<211> 88
<212> PRT
<213> Homo sapiens
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His Val Arg Arg Asp Arg Pro Ile His Leu Ser Phe Asp Val Asp Ala
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                                                         15
1
Met Asp Pro Ser Val Ala Pro Ser Thr Gly Thr Pro Val Arg Gly Gly
                                                     30
                                25
            20
Leu Thr Phe Arg Glu Gly His Tyr Ile Cys Glu Ala Val Ala Glu Thr
                            40
        35
Gly Ser Leu Val Ala Met Asp Met Val Glu Val Asn Pro His Leu Glu
    50
                        55
Lys His Ala Ala Glu Gln Thr Ile Ala Val Gly Cys Ser Leu Ile Arg
                                        75
                    70
65
Ser Ala Leu Gly Glu Thr Leu Leu
                85
<210> 1809
<211> 340
<212> DNA
<213> Homo sapiens
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240
ccgaggtgcc cggatcgccg ggcgattcgc gccccgtttt cgcgattcat gcgcgatcga
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340
```

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<210> 1810
<211> 75
<212> PRT
<213> Homo sapiens
<400> 1810
Xaa Pro Val Ile Ala Ser Val Ser Leu Gly Ala Met Arg Val Phe Asp
                                    10
Leu Arg His Arg Gln Thr Gly Val Thr His Ala Tyr Arg Leu Gly His
                                25
           20
Gly Ser Leu Leu Val Met Arg Gly Pro Thr Gln Ala Glu Trp Gln His
                            40
                                                45
       35
Arg Val Pro Lys Ala Pro Gly Val Gln Gly Glu Arg Val Asn Leu Thr
                                            60
                       55
   50
Phe Arg Arg Val Met Pro Val Gly Met Gly Arg
                    70
<210> 1811
<211> 500
<212> DNA
<213> Homo sapiens
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caggtactgg aaaagaaggg cgatgcactg ctacacgcag gtcagctcat ggaggccgtc
240
gagtgctatg ctcaggccca gacaccggcc tttgaacagg ttgtgctttc tttgatggac
300
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caagetegeg tgeetegtet catgetgget acttggetea ttgaattgta tgtggeegee
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attcaagege atgaacceae ctccgaacat tatcagacae ttttgctgga agcccaggag
acacttgagc ggcatcatga
500
<210> 1812
<211> 166
<212> PRT
<213> Homo sapiens
<400> 1812
Xaa Arg Val Leu Gly Ile Ala Met Asp Ser Ser Ser Asp Thr Cys Trp
                                    10
Ile Tyr Thr Ser Leu Gly Gly Leu Tyr Glu Leu Leu Val Lys Asp Glu
                                25
           20
Ala Arg Asp Met Trp His Leu Leu Leu Lys Arg Cys Asp Phe Glu Lys
```

```
40
Ala Leu Thr Phe Cys Arg Asp Glu Thr Cys Arg Lys Gln Val Leu Glu
                       55
                                          60
   50
Lys Lys Gly Asp Ala Leu Leu His Ala Gly Gln Leu Met Glu Ala Val
                   70
                                       75
Glu Cys Tyr Ala Gln Ala Gln Thr Pro Ala Phe Glu Gln Val Val Leu
                                  90
               85
Ser Leu Met Asp Val Cys Ala Asp Lys Ala Leu Arg Arg Tyr Val Arg
                               105
                                                   110
           100
Leu Arg Leu Asp Lys Met Pro Lys Gln Ala Arg Val Pro Arg Leu Met
                                              125
       115
                          120
Leu Ala Thr Trp Leu Ile Glu Leu Tyr Val Ala Ala Ile Gln Ala His
                                           140
                      135
Glu Pro Thr Ser Glu His Tyr Gln Thr Leu Leu Leu Glu Ala Gln Glu
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                                      155
Thr Leu Glu Arg His His
<210> 1813
<211> 426
<212> DNA
<213> Homo sapiens
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180
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420
tctaca
426
<210> 1814
<211> 108
<212> PRT
<213> Homo sapiens
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Met Thr Ile Gly Arg Ile Tyr Ser Gly Arg Gln Leu Ile Leu Asn Gln
                                   10
1
His Leu Ala Pro Tyr Ser Ile Asn Ile Glu Thr Leu Phe Asn Asn Ala
           20
                               25
                                                   30
Lys Ile His Pro Ser Glu Gly Cys Phe Thr Pro Val Pro Asn Gln Ala
                           40
Pro Ser Glu Ser Asn Asp Val Leu Ala Asp Leu Tyr Ser Ser Glu Ser
```

```
55
                                            60
His Pro Arg Glu Pro Ala Ile Ala Ser Arg Asp Ala Ala Gly Thr Pro
                  70
                                       75
Thr Arg Ser Leu Pro Pro Leu Arg Thr His Ser Ser Ile Glu Met Asn
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                                   90
Pro Ile Gln Pro Trp Ile Pro Ile Thr Thr Ala Leu
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           100
<210> 1815
<211> 303
<212> DNA
<213> Homo sapiens
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cgtgccgatc tcgaggggca acgccgcgcc gagccgcgaa gccagatcgg gcagcgcgat
ceqceageea teggeaaatt egegagtgat gacgageaag ggeegeetgg teteetgege
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300
acc
303
<210> 1816
<211> 98
<212> PRT
<213> Homo sapiens
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Met Ala Thr Leu Ala Pro Arg His Lys Val Ser Arg Ser Gly Gly Ile
                                   10
1
Glu Arg Gln Ala Ala His Leu Gly Met Glu Arg Asp Gln Phe Gly His
           20
                                25
His Arg Val Val Gly Arg Ala Asp Leu Glu Gly Gln Arg Arg Ala Glu
                           40
      35
Pro Arg Ser Gln Ile Gly Gln Arg Asp Pro Pro Ala Ile Gly Lys Phe
                       55
                                          60
Ala Ser Asp Asp Glu Gln Gly Pro Pro Gly Leu Leu Arg Pro Val Pro
                                       75
Ala Val Glu His Val Arg Leu Gly Gln Thr Gly Gly Ile Gly Asp His
                                   90
               85
Gly Thr
<210> 1817
<211> 413
<212> DNA
<213> Homo sapiens
<400> 1817
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tacagggcgt gacgcatgtc ccgtcaaact cgctcccaga cgtgtttgtt attgaccaac
ttccagcagc gataccccta atcaaactcc tgtgtgggcg gcgtgtcatg tactactgtc
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<211> 83
<212> PRT
<213> Homo sapiens
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Phe Asp Ala Ser His Ala Phe Glu Pro Thr Arg Asp Gly Thr Leu Gln
                                                    30
                                25
            20
Val Ile His Ala Lys Thr Trp Ile Pro Arg Ser Leu Phe His Met Leu
                            40
His Leu Arg Trp Pro Phe Ala Ala Val Phe Ser Leu Val Met Gln Val
                                            60
Val Val Ala Ala Tyr Gly Ser Ser Leu Ala Arg His Leu Pro His Val
                    70
65
Tyr Arg Ala
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<212> DNA
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120
aaaggatcag gtgagatcat aagtgacaag gacaaatgcc caagctgtaa aggaaacaaa
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343
<210> 1820
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<211> 114
<212> PRT
<213> Homo sapiens
<400> 1820
Gly Ser Lys Ser Gly Ala Ser Gly Thr Cys His Gly Cys Arg Gly Ala
                                    10
Gly Met Arg Thr Ile Thr Arg Gln Ile Gly Leu Gly Met Ile Gln Gln
                                                  30
                               25
           20
Met Asn Thr Val Cys Pro Glu Cys Lys Gly Ser Gly Glu Ile Ile Ser
                                               45
                          40
Asp Lys Asp Lys Cys Pro Ser Cys Lys Gly Asn Lys Val Val Gln Glu
                       55
                                           60
Lys Lys Val Leu Glu Val His Val Glu Lys Gly Met Gln His Asn Gln
                                       75
                   70
Lys Ile Val Phe Gln Gly Gln Ala Asp Glu Ala Pro Asp Thr Gly Thr
               85
                                   90
Gly Asp Ile Val Phe Val Leu Gln Leu Lys Asp His Pro Lys Phe Lys
                               105
Arg Met
<210> 1821
<211> 285
<212> DNA
<213> Homo sapiens
<400> 1821
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gcccgggaaa agttgctcgc caaggaggec gcccagcgga tgacctagat tgtctactgc
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totagtttca tatgtttctg tocaccagac catgtttaga agott
285
<210> 1822
<211> 55
<212> PRT
<213> Homo sapiens
<400> 1822
Lys Leu Glu Phe Ser Lys Ile Leu Glu Ala Ile Lys Ala Asn Phe Asn
                                   10
1
Asp Lys Phe Asp Glu Val Gly Lys Lys Trp Gly Gly Gly Ile Met Gly
                               25
           20
Ser Lys Ser Gln Ala Lys Thr Lys Ala Arg Glu Lys Leu Leu Ala Lys
       35
Glu Ala Ala Gln Arg Met Thr
                       55
   50
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<210> 1823
<211> 387
<212> DNA
<213> Homo sapiens
<400> 1823
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180
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387
<210> 1824
<211> 129
<212> PRT
<213> Homo sapiens
<400> 1824
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1
                 5
                                    10
Ser Asp Ala Leu Trp Gly Val Val Asp Lys Leu Cys Met Ala Asn Tyr
                                25
           20
Gln Gln Lys Arg Asp Pro Ala Pro Cys Glu Gln Ile Tyr Met Pro Gln
        35
                           40
                                                45
Gly Lys Ala Gln Gly Phe Ser Val Leu Gln Asn Pro Arg Tyr Pro Tyr
                        55
His Phe Ile Leu Val Pro Thr Ala Pro Leu Ser Gly Ile Glu Ser Pro
                                       75
                   70
Leu Leu Leu Ala Gly Glu Arg Thr Asp Tyr Phe Gly Tyr Ala Trp Leu
               85
                                   90
Met Arg Tyr Arg Leu Ala Ala Glu Tyr Gly Gly Pro Val Pro Asp Asp
           100
                               105
                                                    110
Arg Leu Gly Met Ala Ile Asn Ser Ala Tyr Gly Arg Ser Gln Asn Gln
                           120
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Leu
<210> 1825
<211> 413
<212> DNA
<213> Homo sapiens
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120
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300
tetggeetea ggtgegtgge egateegegt geetegeteg gegttatgtg tetgeeggeg
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413
<210> 1826
<211> 124
<212> PRT
<213> Homo sapiens
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1
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Arg Ala Cys Asp Cys Arg Arg His Ile Gly Gly Leu Ala Arg Arg Asp
            20
                                25
Trp Ala Pro Arg His His Val Ala Gly Arg His Gly His Val Gly Val
Val Pro Arg Tyr Ala Arg Pro Phe Leu Leu Ser Val Gly Leu Val Cys
                        55
Leu Glu Arg Asp Ala Trp Pro Thr Gly Thr Arg Cys Ile Gly Gly Leu
                    70
                                                            80
Pro Val Gly His Ala Ala Gly Ser Gly Leu Arg Cys Val Ala Asp Pro
                                    90
                85
Arg Ala Ser Leu Gly Val Met Cys Leu Pro Ala Pro Met Pro Phe Ile
            100
                                105
Ser Cys Ser Tyr Val Thr Trp Leu Ile Ser Thr Arg
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                            120
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<211> 345
<212> DNA
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120
geotacetge aggeogaage geagggeaag gecaacegea egatetetge cegeaagetg
180
tacgecegea tgatgegtae getggeegag aceggeaacg getggatgae etteaaggae
aagtgcaacc gegecageaa ecagaeeetg egteegggca aegtgateea eetgteeaac
ctgtgcaccg aaatcctgga agtcacttcc aacgatgaaa ccgcg
```

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<213> Homo sapiens
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Gln Glu Trp Ser Leu Phe Asp Pro Arg Val Val Pro Glu Phe Thr Asp
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            20
Leu Phe Gly Glu Ala Phe Glu Ala Ala Tyr Leu Gln Ala Glu Ala Gln
                            40
Gly Lys Ala Asn Arg Thr Ile Ser Ala Arg Lys Leu Tyr Ala Arg Met
Met Arg Thr Leu Ala Glu Thr Gly Asn Gly Trp Met Thr Phe Lys Asp
                    70
Lys Cys Asn Arg Ala Ser Asn Gln Thr Leu Arg Pro Gly Asn Val Ile
                                    90
His Leu Ser Asn Leu Cys Thr Glu Ile Leu Glu Val Thr Ser Asn Asp
                                105
            100
Glu Thr Ala
        115
<210> 1829
<211> 4457
<212> DNA
<213> Homo sapiens
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 720
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2340				•		

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Asn Leu Ser Tyr Glu Val Asp Pro Glu Thr Val Asn Ala Gln Glu Asp
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Ser Gln Met Pro Lys Glu Ser Ser Pro Asp Asp Val Gln Gln Val
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Val Phe Asp Leu Ile Cys Lys Val Val Ser Gly Leu Glu Val Glu Ser
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Ala Ser Val Thr Ser Glm Leu Glu Ile Glu Ala Met Pro Pro Lys Cys
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Ser Asp Ile Asp Pro Asp Glu Glu Thr Ile Lys Ile Glu Asp Asp Ser
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          100
Ile Arg Gln Ser Gln Asn Ala Leu Leu Ser Asn Glu Ser Ser Gln Phe
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Leu Ser Val Ser Ala Glu Gly Gly His Glu Cys Val Ala Asn Gly Ile
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Ser Arg Asn Ser Ser Ser Pro Cys Ile Ser Gly Thr Thr His Thr Leu
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His Asp Ser Ser Val Ala Ser Ile Glu Thr Lys Ser Arg Gln Arg Ser
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              165
His Ser Ser Ile Gln Phe Ser Phe Lys Glu Lys Leu Ser Glu Lys Val
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Ser Glu Lys Glu Thr Ile Val Lys Glu Ser Gly Lys Gln Pro Gly Ala
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Lys Pro Lys Val Lys Leu Ala Arg Lys Lys Asp Asp Lys Lys Lys
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Ser Ser Asn Glu Lys Leu Lys Gln Thr Ser Vàl Phe Phe Ser Asp Gly
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Asn	Asn	ALA	Tyr		Pro	GIN	ren	ser		rea	GIN	ASN	Leu		Ala
R	***	A	T1_	325	1703	Mon	c1	7	330	Dh.	T	Co-	174.0	335	D
Arg	nis	Arg	340	261	Val	MEC	GTÀ	345	Asp	Pne	ıyı	ser	350	ire	Pro
Va l	Acn	Car		Wie	Asn	Dha	λνα		Sar	Met	Tur	Tla		Tla	Len
var	лар	355	non	1113	A311	rne	360	561	561	MCC	1 7 1	365	GIU	110	Deu
Tle	Ser		Cvs	I.eu	Tyr	Tvr		Δτσ	Ser	His	Tvr		Thr	His	Va1
	370		-,-		-,-	375					380				• 4,2
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385					390			•		395					400
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	Ala	Val	Glu	Glu	Gly	Phe	Ser	Glu	Asp		Leu	Ile	Asn	Phe	
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GIU	Asp	GIU	Pne	485	Asn	GIY	Ser	Int	490	GIII	ser	GIII	Leu	495	гуз
Val	Leu	Gln	Δτα		Ile	Val	I.em	Glu		Ara	Va 1	Mot	Thr		Pro
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Ser	Val		Leu	Gin	Leu	Cys	-	Asn	Leu	Asp	Asn		Ile	Gln	GIn
_	•	595 m		m1	~ 3.	.	600				_	605			
ıyr		ıyr	GTII	rnr	Gly		ser	Asp	ser	Arg		ren	rrp	Met	AIG
ce~	610	τla	Dro	Dro	700	615 Mer	Tla	T e	Th.	ī e…	620	C1	GI.	т1^	Th∽
625	116	116	710	-10	Asp 630	17C C	116	neu	1111	635	neu	GIU	GIY	116	640
	Tle	Tle	His	Tvr	Cys	Leu	Len	Agn	Pro		Thr	Gln	Tvr	Hi <	
				645	-,-			p	650			~	- / -	655	
Leu	Leu	Val	Ser		Asp	Gln	Lys	His		Рће	Glu	Ala	Arq		Gly
							., _								

			660					665					670		
710	T 011	C0=			ui.	Mor	T10				17-1			T au	Trn
He	Leu			Leu	HIS	Met	Ile 680	Mec	ser	sei	val		Leu	ren	ırp
	- 1 -	675		G1 -					~1		14-A	685	73 -		21-
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705	_ •				710			_		715		_			720
Gln	Gln	Ile	Leu		Leu	Leu	Gly	Pro			Met	Asn	His		Val
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785					790					795					800
Ala	Lys	Asp	Lys	Lys	His	Leu	Ser	Leu	Glu	Val	Cys	Met	Leu	Gln	Phe
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	-	1075					1080			_		1085			
Leu	Leu			Leu	Ala	Phe	Ala		Phe	Ser	Ser			Asp	Gln
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1100

1095

1090

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Arg Leu Pro Gln Val Pro Thr Leu His Ser Gln Val Phe Leu Phe Phe
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Arg Val Leu Leu Leu Arg Met Ser Pro Gln His Leu Thr Ser Leu Trp
        1140 1145 1150
Pro Thr Met Ile Thr Glu Leu Val Gln Val Phe Leu Leu Met Glu Gln
     1155 1160
                            1165
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  1170 1175 1180
Ala Gly Leu Glu Thr Thr Tyr Thr Gly Gly Asn Gly Phe Ser Thr Ser
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Met Tyr Arg Trp Ala Phe Ile Pro Glu Ala Ser Asp Asp Ser Gly Leu
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Glu Val Arg Arg Gln Gly Ile His Gln Arg Glu Phe Lys Pro Tyr Val
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Leu Thr Ile Cys Thr Val Arg Ser Met Glu Gln Leu Leu Pro Phe Phe
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Asn Val Leu Ser Gln Val Phe Asn Ser Lys Val Thr Ser Arg Cys Gly
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Gly His Ser Gly Ser Pro Ile Leu Tyr Ser Asn Ala Phe Pro Asn Lys
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Asp Met Lys Leu Glu Asn His Lys Pro Cys Ser Ser Lys Ala Arg Gln
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Tyr Asp Asn Ala Leu Lys Gly Phe Ile Leu Glu Ala Arg Pro Ser Gly
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Gln Cys Lys Ile Gly Asp Ala Ala Ala Val Ser Tyr Asp Lys Ala Arg
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Gln Lys Ala Met Arg Leu Arg Trp Lys Val Glu Trp Gly Gly Asn Pro
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                                                         95
Leu Glu Glu Arg Gln Ala Leu Arg Ala Val Pro Thr Leu Ala Glu Phe
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                                                     110
Ile Arg Glu Thr Tyr Val Pro His Ile His Leu His Arg Arg Asn Phe
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                            120
                                                 125
Gln Ser Thr Leu Ser Phe Leu Lys Cys His Val Leu Pro Arg Phe Gly
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gcatcaccag gttgaaaccg atgatccacg ccgcgatgct ttctcggcgc gggtttggca
240
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300
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                            40
                                                45
His His Gln Val Glu Thr Asp Asp Pro Arg Arg Asp Ala Phe Ser Ala
Arg Val Trp Gln Arg Leu Gly Leu Gly Phe Pro Ala Phe Arg Arg Arg
                    70
                                        75
Pro Ala Ile Leu Glu Ile Asp Glu His Leu Arg Arg Ser Cys Cys Gln
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                                                        95
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getgeageac ceteagggta tecegecace ceaggeactg teceaceete agageeteea
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420
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Pro Ser Gly Tyr Pro Ala Thr Pro Gly Thr Val Pro Pro Ser Glu Pro
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Pro Ala Ala Ser Gly Pro Gly Pro Pro Ser Ala His Gly Pro Asn Pro
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Gly Leu Gly Pro Pro Ser Gly Pro Gly Ser Pro Gly Ser Pro Ala Pro
Pro Gln Ser Leu Ala Ala Trp Arg Pro Glu Asp Ala Arg Leu Arg Cys
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Tyr Leu Pro Ala Pro Tyr Gly Pro Ile Ala Ala Asp Val Lys Gln Thr
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Ala Ala Asp Ala Ala Phe Lys Ala Ala Val Pro Gly Asn Lys Phe Arg
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Asp Val His Ala Ala Ala Met Asn Val Leu Ala Ser Arg Leu Glu Asp
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Trp Gly Leu Met Pro Val Ser Ala Lys Val Ala Leu Ser Asp Glu Gly
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<213> Homo sapiens
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Xaa Ser Lys Asn Val Pro Glu Trp Gly Pro Arg Ala Leu Glu Leu Pro
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Gly Gly Pro Gly Val Asp Pro Val Val Glu Ile Gly Gly Pro Gly Thr
           20
Leu Ala Gln Ser Met Val Ala Pro Arg Val Gly Ala His Val Ala Leu
                                               45
                           40
       35
Ile Gly Val Leu Xaa Gly Asp Cys Arg Ala Val Arg Thr Ala Leu Leu
                      55
                                          60
Met Ser Lys Asn Leu Arg Val Gln Gly Leu Pro Val Gly Ser Arg Ala
                   70
Gln Gln Leu Ala Met Ile Ala Gly Val Glu Ala Asn Gly Ile Arg Pro
               85
                                  90
Ile Leu Asp Gln His Phe Pro Leu Glu Asn Leu Pro Asp Ala
                               105
           100
<210> 1843
<211> 473
<212> DNA
<213> Homo sapiens
<400> 1843
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acagttttga gtccagatta acaccaagca ggttcatgaa agccttaagt tatgcatcat
tagataaaga agatttattg agtoctatta atcaaaatac cotgoaacga tottoctcag
tgcggtccat ggtgtccagt gccacatatg ggggttcaga tgattacatt ggtcttgctc
tcccggtgga tataaatgat atattccagg taaaggatat tccctatttt cagacaaaaa
acataccacc acatgatgat cgaggtgcaa gagcatttgc ccatgatgca ggaggtcttc
catctggaac tggaggtctt gtaaaaaatt cttttcactt gctacgacag cagatgagtc
ttacqqaaat aatqaattca atccattcag atgcctctcn cnnccncncc ccc
<210> 1844
<211> 141
<212> PRT
<213> Homo sapiens
<400> 1844
Met Lys Ala Asn Ser Phe Glu Ser Arg Leu Thr Pro Ser Arg Phe Met
                                    10
                5
Lys Ala Leu Ser Tyr Ala Ser Leu Asp Lys Glu Asp Leu Leu Ser Pro
                                                    30
            20
                                25
Ile Asn Gln Asn Thr Leu Gln Arg Ser Ser Ser Val Arg Ser Met Val
                            40
Ser Ser Ala Thr Tyr Gly Gly Ser Asp Asp Tyr Ile Gly Leu Ala Leu
                                            60
                        55
Pro Val Asp Ile Asn Asp Ile Phe Gln Val Lys Asp Ile Pro Tyr Phe
Gln Thr Lys Asn Ile Pro Pro His Asp Asp Arg Gly Ala Arg Ala Phe
                                    90
               8.5
Ala His Asp Ala Gly Gly Leu Pro Ser Gly Thr Gly Gly Leu Val Lys
                                105
                                                    110
Asn Ser Phe His Leu Leu Arg Gln Gln Met Ser Leu Thr Glu Ile Met
                                                125
                            120
       115
Asn Ser Ile His Ser Asp Ala Ser Xaa Xaa Xaa Rro
   130
                        135
                                            140
<210> 1845
<211> 390
<212> DNA
<213> Homo sapiens
<400> 1845
aagettacga egeetagett tggagaeetg aaceaettga teagtgeaac aatgagtgga
gtgacttgct gcctccgctt cccggggcag ctcaactcgg accttcggaa acttgcagtg
aacctgattc cattcoctcg cctgcacttt tttatggtcg gctttgcgcc actcacctcg
180
```

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cgtggctccc agcagtaccg tgctctcact gtccctgagc tgacccagca gatgtgggac
tecaagaaca tgatgtgtge tgetgaeceg egteatggee getaceteae agtatetgee
atgttccgtg gaaagatgag caccaaggag gtggacgagc agatgctgaa cgtgcagaac
aagaactett cetacttegt ggagtggate
390
<210> 1846
<211> 130
<212> PRT
<213> Homo sapiens
<400> 1846
Lys Leu Thr Thr Pro Ser Phe Gly Asp Leu Asn His Leu Ile Ser Ala
                 5
                                    10
Thr Met Ser Gly Val Thr Cys Cys Leu Arg Phe Pro Gly Gln Leu Asn
            20
                                25
                                                     30
Ser Asp Leu Arg Lys Leu Ala Val Asn Leu Ile Pro Phe Pro Arg Leu
                            40
His Phe Phe Met Val Gly Phe Ala Pro Leu Thr Ser Arg Gly Ser Gln
                        55
                                            60
Gln Tyr Arg Ala Leu Thr Val Pro Glu Leu Thr Gln Gln Met Trp Asp
65
                    70
                                        75
Ser Lys Asn Met Met Cys Ala Ala Asp Pro Arg His Gly Arg Tyr Leu
                85
                                    90
                                                         95
Thr Val Ser Ala Met Phe Arg Gly Lys Met Ser Thr Lys Glu Val Asp
            100
                                105
Glu Gln Met Leu Asn Val Gln Asn Lys Asn Ser Ser Tyr Phe Val Glu
                                                125
Trp Ile
    130
<210> 1847
<211> 343
<212> DNA
<213> Homo sapiens
<400> 1847
cageogtget ttectgegte aactegggaa eggetatate gegeagatee aacagtteea
tggctcgaag agtagtaaaa atatcaataa ctggcagagc atcgcgtcaa gctggcgacc
ctggccgccg ccgcgttggc cgatcacgcc atgttggagc aggccttcca gctgttccag
caaaaaagtt gcggacaatc tcctgccgga tggctcggtg ttcgacttca gggagcgcga
tgcactgcac tacgtcgtct atgacctgga gccgctggtt caggcggccc tggcgggcaa
300
gccctaacgg tggcaactgg ctgacttaca ccgccccac cgn
343
<210> 1848
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<211> 94
<212> PRT
<213> Homo sapiens
<400> 1848
Met Ala Arg Arg Val Val Lys Ile Ser Ile Thr Gly Arg Ala Ser Arg
                                    10
Gln Ala Gly Asp Pro Gly Arg Arg Arg Val Gly Arg Ser Arg His Val
                                                    30
                                25
           20
Gly Ala Gly Leu Pro Ala Val Pro Ala Lys Lys Leu Arg Thr Ile Ser
                                                45
                            40
       35
Cys Arg Met Ala Arg Cys Ser Thr Ser Gly Ser Ala Met His Cys Thr
                                            60
                        55
   50
Thr Ser Ser Met Thr Trp Ser Arg Trp Phe Arg Arg Pro Trp Arg Ala
                                        75
                    70
Ser Pro Asn Gly Gly Asn Trp Leu Thr Tyr Thr Ala Pro Thr
                85
<210> 1849
<211> 390
<212> DNA
<213> Homo sapiens
<400> 1849
cggaaagaac aggttcagca aagagcaata gaatgttccc gggctctcag tgcgattctt
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gacattgaac atggagaccc aaaagagaat gtactaggtt cagcttttga catgaaacag
ctgaaggatg ctattgatga gactaaaata gctttgatgg gacattcttt tggaggagca
acagttette aageeettag tgaggaeeag agatteagat gtggagttge tettgateea
tggatgtatc cggtgaacga agagctgtac tccagaaccc tccagcctct cctctttatc
aactotgoca aattocagao tocaaaggao atogoaaaaa tgaaaaagtt otaccagoot
gacaaggaaa ggaaanatga ttacaatcaa
<210> 1850
<211> 130
<212> PRT
<213> Homo sapiens
<400> 1850
Arg Lys Glu Gln Val Gln Gln Arg Ala Ile Glu Cys Ser Arg Ala Leu
Ser Ala Ile Leu Asp Ile Glu His Gly Asp Pro Lys Glu Asn Val Leu
                                25
Gly Ser Ala Phe Asp Met Lys Gln Leu Lys Asp Ala Ile Asp Glu Thr
                                                45
                            40
Lys Ile Ala Leu Met Gly His Ser Phe Gly Gly Ala Thr Val Leu Gln
                                            60
                        55
Ala Leu Ser Glu Asp Gln Arg Phe Arg Cys Gly Val Ala Leu Asp Pro
```

```
75
                    70
Trp Met Tyr Pro Val Asn Glu Glu Leu Tyr Ser Arg Thr Leu Gln Pro
                85
                                    90
Leu Leu Phe Ile Asn Ser Ala Lys Phe Gln Thr Pro Lys Asp Ile Ala
                                                    110
                                105
Lys Met Lys Lys Phe Tyr Gln Pro Asp Lys Glu Arg Lys Xaa Asp Tyr
                            120
Asn Gln
   130
<210> 1851
<211> 574
<212> DNA
<213> Homo sapiens
<400> 1851
ncgatcggag aggettteeg eactggtgae ttggaeteta agecegaece cageeggage
ttcaggcctt accgagctga agacaatgat tcctatgcct ctgagatcaa ggagctgcag
ctggtgctgg ctgaggccca cgacagcctc cggggcttgc aagagcagct ctcccaggag
cggcagctac gaaaggagga ggccgacaat ttcaaccaga aaatggtcca gctgaaggag
240
gaccagcaga gggcgctcct gaggcgggag tttgagctgc agagtctgag cctccagcgg
aggetggage agaaattetg gagecaggag aagaacatge tggtgeagga gteecageaa
ttcaaqcaca acttcctqct gctcttcatg aagctcaggt ggttcctcaa gcgctggcgg
cagggcaagg ttttgcccag cgaaggggat gacttcctcg aggtgaacag catgaaggac
ctgtacttgc tgatggagga agacgagata aacgctcagc attctgataa caaggcctgc
acgggggaca gctggaccca gaacacgccc aatg
<210> 1852
<211> 191
<212> PRT
<213> Homo sapiens
<400> 1852
Xaa Ile Gly Glu Ala Phe Arg Thr Gly Asp Leu Asp Ser Lys Pro Asp
                                    10
Pro Ser Arg Ser Phe Arg Pro Tyr Arg Ala Glu Asp Asn Asp Ser Tyr
Ala Ser Glu Ile Lys Glu Leu Gln Leu Val Leu Ala Glu Ala His Asp
Ser Leu Arg Gly Leu Gln Glu Gln Leu Ser Gln Glu Arg Gln Leu Arg
                                            60
                       55
Lys Glu Glu Ala Asp Asn Phe Asn Gln Lys Met Val Gln Leu Lys Glu
                                        75
                    70
Asp Gln Gln Arg Ala Leu Leu Arg Arg Glu Phe Glu Leu Gln Ser Leu
```

```
90
               85
Ser Leu Gln Arg Arg Leu Glu Gln Lys Phe Trp Ser Gln Glu Lys Asn
                             105
         100
Met Leu Val Gln Glu Ser Gln Gln Phe Lys His Asn Phe Leu Leu
                                     125
                         120
Phe Met Lys Leu Arg Trp Phe Leu Lys Arg Trp Arg Gln Gly Lys Val
           135
                                         140
Leu Pro Ser Glu Gly Asp Asp Phe Leu Glu Val Asn Ser Met Lys Asp
                 150
                                    155
Leu Tyr Leu Leu Met Glu Glu Asp Glu Ile Asn Ala Gln His Ser Asp
            165 170
Asn Lys Ala Cys Thr Gly Asp Ser Trp Thr Gln Asn Thr Pro Asn
                             185
<210> 1853
<211> 338
<212> DNA
<213> Homo sapiens
<400> 1853
geoggegeeg accaagecae ggeatgeece acceaecttg gaagaggtgt egtteegeea
cgtcattgag gagcgcgccg tcgaagctga cttgttcgtc cgctcgctca atacactcga
120
geetgegaeg ggeatggeac ttetgegeat etegeaceae atggatggea aggteggeae
gacgttttac ctggatgacg atgtcatttt tgtcgcgcca cagaagcagc gctcagccga
240
gggccagega etegaatacg agecegtete tttggccgag ttgetegage gegetgetge
300
atagaataca tatacccaag ctatgatgat gccgtcgt
33B
<210> 1854
<211> 100
<212> PRT
<213> Homo sapiens
<400> 1854
Met Pro His Pro Pro Trp Lys Arg Cys Arg Ser Ala Thr Ser Leu Arg
                                  10
1
Ser Ala Pro Ser Lys Leu Thr Cys Ser Ser Ala Arg Ser Ile His Ser
                              25
Ser Leu Arg Arg Ala Trp His Phe Cys Ala Ser Arg Thr Thr Trp Met
                          40
Ala Arg Ser Ala Arg Arg Phe Thr Trp Met Thr Met Ser Phe Leu Ser
                                         60
Arg His Arg Ser Ser Ala Gln Pro Arg Ala Ser Asp Ser Asn Thr Ser
                                     75
                  70
Pro Ser Leu Trp Pro Ser Cys Ser Ser Ala Leu Leu His Arg Ile His
                                 90
Ile Pro Lys Leu
           100
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<210> 1855
<211> 429
<212> DNA
<213> Homo sapiens
<400> 1855
gegteetteg egtacgtgga egagggeggg eaggtgtteg teeagtgeag eacceageae
ccgagcgaaa cgcaggaaat cgtggcgcac gtcctggacc tggacaacca cgaggtcacg
gtgcagtgct tgcgcatggg cggtggcttt ggcggtaagg aaatgcagcc gcacgggttc
gccgcgatcg cagcactcgg cgcgaccctg accgggcgac cggttcgact gcgactgacc
240
cgaaaccagg acatcaccat ctccggaaag cgccacccat acctcgcgga gtgggacgtg
geettegaeg acgaeggeeg cetecagget etgegegeea eegteaceag egaeggeggg
tggagcctgg acctctcgga gccggtgatg cagcggacgg tgtgtcacat cgataactcc
420
tattggatc
429
<210> 1856
<211> 143
<212> PRT
<213> Homo sapiens
<400> 1856
Ala Ser Phe Ala Tyr Val Asp Glu Gly Gly Gln Val Phe Val Gln Cys
1
                5
Ser Thr Gln His Pro Ser Glu Thr Gln Glu Ile Val Ala His Val Leu
                                25
Asp Leu Asp Asn His Glu Val Thr Val Gln Cys Leu Arg Met Gly Gly
                            40
        35
Gly Phe Gly Gly Lys Glu Met Gln Pro His Gly Phe Ala Ala Ile Ala
                        55
Ala Leu Gly Ala Thr Leu Thr Gly Arg Pro Val Arg Leu Arg Leu Thr
                   70
                                        75
Arg Asn Gln Asp Ile Thr Ile Ser Gly Lys Arg His Pro Tyr Leu Ala
                                    90
                85
Glu Trp Asp Val Ala Phe Asp Asp Asp Gly Arg Leu Gln Ala Leu Arg
                                105
                                                   110
            100
Ala Thr Val Thr Ser Asp Gly Gly Trp Ser Leu Asp Leu Ser Glu Pro
                           120
       115
Val Met Gln Arg Thr Val Cys His Ile Asp Asn Ser Tyr Trp Ile
                                            140
                        135
    130
<210> 1857
<211> 393
<212> DNA
<213> Homo sapiens
<400> 1857
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gtgcacgccg ctgccccagc cgtcgcctac cgatcaacag acgcagccgc cgtgcgttga
gataccagec gageacgate atgeteagea tggteageag cagecagaae ggaaategea
gcaggcgctc gaacagctca ctgccaccca gcaccagcgg gattgccccg gccacgacca
180
gtgcgccgag gagcagccac catcgcccgc tcatgctgcg gcactcgata ccaatacgtt
gegetteaac caategatet tggtegagge atgeegeeca tettecaaca ggegagteac
cagactcage cagtaacace gegaaaaate gtggegeatg tegacagggt geaaacegag
360
acgcagcacg ggtgcctgtc ggtggcgggc gag
<210> 1858
<211> 104
<212> PRT
<213> Homo sapiens
<400> 1858
Met Leu Ser Met Val Ser Ser Ser Gln Asn Gly Asn Arg Ser Arg Arg
                                                        15
                                    10
Ser Asn Ser Ser Leu Pro Pro Ser Thr Ser Gly Ile Ala Pro Ala Thr
                                                    30
                                25
            20
Thr Ser Ala Pro Arg Ser Ser His His Arg Pro Leu Met Leu Arg His
                                                45
        35
                            40
Ser Ile Pro Ile Arg Cys Ala Ser Thr Asn Arg Ser Trp Ser Arg His
                        55
    50
Ala Ala His Leu Pro Thr Gly Glu Ser Pro Asp Ser Ala Ser Asn Thr
                                        75
                    70
65
Ala Lys Asn Arg Gly Ala Cys Arg Gln Gly Ala Asn Arg Asp Ala Ala
                                    90
                85
Arg Val Pro Val Gly Gly Arg
            100
<210> 1859
<211> 345
<212> DNA
<213> Homo sapiens
<400> 1859
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ttccacatgt tttttctcgc acgatactgc aagcttctgg aggagaactc atttagagga
agaactgccg acttttttta catgctcttg tttggtgcta ctgtcctaac tagcattgtt
ctgatcggag ggatgatacc ttacatttcc gagacatttg ccagaattct gttcctgagc
aattcattga cgtttatgat ggtttatgtc tggagcaagc acaatcctat catccatatg
agcaatcigg gcctgttcac ctttacggct gcatacttac catgg
345
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<210> 1860
<211> 115
<212> PRT
<213> Homo sapiens
<400> 1860
Xaa Ile Trp Arg Leu Val Thr Asn Phe Leu Tyr Phe Arg Lys Met Asp
                                    10
Leu Asp Phe Leu Phe His Met Phe Phe Leu Ala Arg Tyr Cys Lys Leu
                                                    30
           20
                                25
Leu Glu Glu Asn Ser Phe Arg Gly Arg Thr Ala Asp Phe Phe Tyr Met
                                                45
                            40
Leu Leu Phe Gly Ala Thr Val Leu Thr Ser Ile Val Leu Ile Gly Gly
                       55
Met Ile Pro Tyr Ile Ser Glu Thr Phe Ala Arg Ile Leu Phe Leu Ser
                   70
                                        75
Asn Ser Leu Thr Phe Met Met Val Tyr Val Trp Ser Lys His Asn Pro
                                    90
               85
Ile Ile His Met Ser Asn Leu Gly Leu Phe Thr Phe Thr Ala Ala Tyr
                               105
           100
Leu Pro Trp
       115
<210> 1861
<211> 435
<212> DNA
<213> Homo sapiens
<400> 1861
gcgttgactg tagtgagtga cgaagctgat atacaaaatg cgccgggcgt tagaaaagcc
aatagtgage tteatteagt eggettaggt gttatgaact tacatggeta tettgetaaa
aacaaaattg gctatgagtc ggaagaagct aaagattttg ctaatatatt ctttatgatg
atgaattact attcacttga aagatcaatg caaatagcaa aagaaagaca ggaaacgttt
aaagactttg ataagtcaga ttatgcaaat ggaaaatatt tcgaatttta tacttcgcaa
tcatttgaac cgaaatacga aaaagtacgt aaattatttg atggtttaga aatcccaacg
cctgaagatt ggaaagcatt gcaaaaagaa gttgaaactc acggtttatt ccatgcttat
420
cgtttagcga ttgca
435
<210> 1862
<211> 145
<212> PRT
<213> Homo sapiens
<400> 1862
Ala Leu Thr Val Val Ser Asp Glu Ala Asp Ile Gln Asn Ala Pro Gly
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10
Val Arg Lys Ala Asn Ser Glu Leu His Ser Val Gly Leu Gly Val Met
                                25
Asn Leu His Gly Tyr Leu Ala Lys Asn Lys Ile Gly Tyr Glu Ser Glu
                            40
Glu Ala Lys Asp Phe Ala Asn Ile Phe Phe Met Met Asn Tyr Tyr
                                            60
                       55
Ser Leu Glu Arg Ser Met Gln Ile Ala Lys Glu Arg Gln Glu Thr Phe
                                        75
                    70
Lys Asp Phe Asp Lys Ser Asp Tyr Ala Asn Gly Lys Tyr Phe Glu Phe
                85
                                    90
Tyr Thr Ser Gln Ser Phe Glu Pro Lys Tyr Glu Lys Val Arg Lys Leu
                                                    110
                                105
            100
Phe Asp Gly Leu Glu Ile Pro Thr Pro Glu Asp Trp Lys Ala Leu Gln
                                                125
                            120
        115
Lys Glu Val Glu Thr His Gly Leu Phe His Ala Tyr Arg Leu Ala Ile
                                            140
                        135
    130
Ala
145
<210> 1863
<211> 792
<212> DNA
<213> Homo sapiens
<400> 1863
nggatectea egecegeeat cataegtggg atategttga geaaatgegt catgaegggg
60
teteegtegt geteactace cacaacatgg atgaggetea acggetgget gateacgtet
ggatcgtcga tcgcggcagg gtcgcaactc atggaactgt gccagagctc accgctgagt
cgagtttgga agatgtgttc ctcactcaca ctagtgaccg cgcagcaggg aggaattgac
atgacgacac tegateteeg eccegeacet caggeegeae eggetgetge aegegtgegt
aaccacgete teaccgaggt gegtetggtg atgegeaaeg gtgageaget getactaget
ctcgtcattc ccatcgggat catcgtcgcc gggcgcttcc tgggcggccg ggtcggactg
acgatggacg tettageace etcagtgetg gegetegeea tetggtegae atgttteact
480
toccaagoga toatgacogg tittgaacgo ogttacgggg tgotogaacg attgtocgoa
accccgttag gtcggtcggg tctgctagct ggcaaggcga tggcttattc cgttatcagt
ctcgctcagg tgatactgct tgtcatcatc tctttagcgc tgggctggca cccccacggt
teeggeetgg cetggeteec aaccetggtg agegttgtge tegecatgat gacatteggg
ctcgcagcac tggcaatggc cggcgctggc aaagctgaag tcactctcgg actggccaac
780
ttggtataca tc
792
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<210> 1864 <211> 264 <212> PRT

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<213> Homo sapiens
<400> 1864
Xaa Ile Leu Thr Pro Ala Ile Ile Arg Gly Ile Ser Leu Ser Lys Cys
                                10
Val Met Thr Gly Ser Pro Ser Cys Ser Leu Pro Thr Thr Trp Met Arg
                            25
       20
Leu Asn Gly Trp Leu Ile Thr Ser Gly Ser Ser Ile Ala Ala Gly Ser
                                            45
                         40
    35
Gln Leu Met Glu Leu Cys Gln Ser Ser Pro Leu Ser Arg Val Trp Lys
                                        60
                    55
Met Cys Ser Ser Leu Thr Leu Val Thr Ala Gln Gln Gly Gly Ile Asp
                70
                                     75
65
Met Thr Thr Leu Asp Leu Arg Pro Ala Pro Gln Ala Ala Pro Ala Ala
              85
                                90
Ala Arg Val Arg Asn His Ala Leu Thr Glu Val Arg Leu Val Met Arg
                             105
                                               110
          100
Asn Gly Glu Gln Leu Leu Leu Ala Leu Val Ile Pro Ile Gly Ile Ile
                                            125
            120
Val Ala Gly Arg Phe Leu Gly Gly Arg Val Gly Leu Thr Met Asp Val
                                        140
            135
Leu Ala Pro Ser Val Leu Ala Leu Ala Ile Trp Ser Thr Cys Phe Thr
                                    155
           150
Ser Gln Ala Ile Met Thr Gly Phe Glu Arg Arg Tyr Gly Val Leu Glu
                                170
              165
Arg Leu Ser Ala Thr Pro Leu Gly Arg Ser Gly Leu Leu Ala Gly Lys
                                                190
                             185
        180
Ala Met Ala Tyr Ser Val Ile Ser Leu Ala Gln Val Ile Leu Leu Val
                                            205
                         200
Ile Ile Ser Leu Ala Leu Gly Trp His Pro His Gly Ser Gly Leu Ala
                                        220
                      215
Trp Leu Pro Thr Leu Val Ser Val Val Leu Ala Met Met Thr Phe Gly
                                   235
                230
Leu Ala Ala Leu Ala Met Ala Gly Ala Gly Lys Ala Glu Val Thr Leu
             245
                                  250
Gly Leu Ala Asn Leu Val Tyr Ile
           260
<210> 1865
<211> 717
<212> DNA
<213> Homo sapiens
<400> 1865
ngccggctga tcaaacaact cacagacatg ggcttcccga gagagccagc tgaggaggcc
ttgaagagta acaatatgaa tottgatcag gocatgageg ctctgctgga aaagaaggtg
gacgtggaca agcgtgggct gggagtgacc gaccataatg gaatggccgc caagcccctc
1.80
```

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ggctgccgcc cgccaatctc caaagagtct tccgtggacc gccccaccct tcttgacaag
gatggcggcc tcgtggaaga gcccacgcct tcaccgttct tgccttcccc aagcctgaag
ctececettt cacacagtge actececagt caggecetgg gtggggttge etcegggetg
ggcatgcaaa acttgaattc ttctagacag ataccgagtg gcaatctggg tatgtttggc
420
aatagtggag cagcacaagc caggaccatg cagcagccgc cacagccacc agtgcagcct
cttaactctt cccagcccag tctccgtgct caagtgcctc agtttctatc ccctcaggtt
caagcacage ttttgcagtt tgcagcaaaa aacattggte tcaaccetge actattaacc
togocaatta atootoaaca tatgacgatg ttgaaccago totatoagot goagotggoa
taccaacgtt tacaaatcca gcagcagatg ttacaggccc agcgtaatgt gtccgga
<210> 1866
<211> 239
<212> PRT
<213> Homo sapiens
<400> 1866
Xaa Arg Leu Ile Lys Gln Leu Thr Asp Met Gly Phe Pro Arg Glu Pro
                                   10
                - 5
Ala Glu Glu Ala Leu Lys Ser Asn Asn Met Asn Leu Asp Gln Ala Met
                                25
Ser Ala Leu Leu Glu Lys Lys Val Asp Val Asp Lys Arg Gly Leu Gly
                            40
        35
Val Thr Asp His Asn Gly Met Ala Ala Lys Pro Leu Gly Cys Arg Pro
                        55
                                            60
Pro Ile Ser Lys Glu Ser Ser Val Asp Arg Pro Thr Leu Leu Asp Lys
                                        75
                    70
Asp Gly Gly Leu Val Glu Glu Pro Thr Pro Ser Pro Phe Leu Pro Ser
                                   90
                85
Pro Ser Leu Lys Leu Pro Leu Ser His Ser Ala Leu Pro Ser Gln Ala
                                                   110
                               105
           100
Leu Gly Gly Val Ala Ser Gly Leu Gly Met Gln Asn Leu Asn Ser Ser
                                                125
                           120
        115
Arg Gln Ile Pro Ser Gly Asn Leu Gly Met Phe Gly Asn Ser Gly Ala
                        135
                                           140
    130
Ala Gln Ala Arg Thr Met Gln Gln Pro Pro Gln Pro Pro Val Gln Pro
                                        155
                    150
Leu Asn Ser Ser Gln Pro Ser Leu Arg Ala Gln Val Pro Gln Phe Leu
                                                        175
                                    170
                165
Ser Pro Gln Val Gln Ala Gln Leu Leu Gln Phe Ala Ala Lys Asn Ile
                               185
           180
Gly Leu Asn Pro Ala Leu Leu Thr Ser Pro Ile Asn Pro Gln His Met
                                                205
                            200
        195
Thr Met Leu Asn Gln Leu Tyr Gln Leu Gln Leu Ala Tyr Gln Arg Leu
                       215
Gln Ile Gln Gln Met Leu Gln Ala Gln Arg Asn Val Ser Gly
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225
                    230
                                        235
<210> 1867
<211> 518
<212> DNA
<213> Homo sapiens
<400> 1867
nnggggcacg gttagggcca gtgggcagag gggtgaggga tatgcaggac cttccactgt
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gaggaaggga actgtctggt gcgccagtgt tgttcaagga ggatgtgaca agacaggcca
180
tctggttggc tggccctgtt acccaacaac gtggtggcca aggccttgtg cccggagagg
ttcttggggg ccagcagggg gctacatagg acatgggtgg ggaccccagc tccgagccca
300
cototoctgo otocaccoot tocacconng cageococgo ototocogoa gaactotoco
caagccagac cgcctggacc ggctgcttaa gtcaggcttt gggacatacc ctgggaggaa
gcgaggtgct ttgcaccccc aagtgatcat gttcccgtgc ccagcctgcc aaggtgatgt
ggagettggg gageggggte tggeaggget tttcegga
518
<210> 1868
<211> 73
<212> PRT
<213> Homo sapiens
<400> 1868
Gln Asp Arg Pro Ser Gly Trp Leu Ala Leu Leu Pro Asn Asn Val Val
                                    10
Ala Lys Ala Leu Cys Pro Glu Arg Phe Leu Gly Ala Ser Arg Gly Leu
His Arg Thr Trp Val Gly Thr Pro Ala Pro Ser Pro Pro Leu Leu Pro
        35
                            40
Pro Pro Leu Pro Pro Xaa Gln Pro Pro Pro Leu Pro Gln Asn Ser Pro
                                            60
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Gln Ala Arg Pro Pro Gly Pro Ala Ala
                    70
<210> 1869
<211> 436
<212> DNA
<213> Homo sapiens
<400> 1869
acgcgtcacc ttcctgctgg agctactggg agccctcgga cacctgcgtg cattgcccga
ccgtgacatg ccgagcaccg aaacccacct gtggattcgc gagctgagcc gcatcgaccg
120
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cgacgtgtcg actgccaccc actttcgttg gagcgacgac ggcaccgtgc taggtcagac
gaccgacgat ggcaccgage ctgaggttgt tgccctgcca geggtetact geegtegttg
cggccgcagc ggatggggag tccagctcgc cagcaccggc aataacctca gcgagaacaa
cgacagcatc cgacggaccc acgcggcaca cgacggtcgc ttccgagcct tgctttcggc
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cgacaccgtc aacagg
436
<210> 1870
<211> 123
<212> PRT
<213> Homo sapiens
<400> 1870
Met Pro Ser Thr Glu Thr His Leu Trp Ile Arg Glu Leu Ser Arg Ile
                                    10
Asp Arg Asp Val Ser Thr Ala Thr His Phe Arg Trp Ser Asp Asp Gly
                                                    30
                                25
            20
Thr Val Leu Gly Gln Thr Thr Asp Asp Gly Thr Glu Pro Glu Val Val
                            40
        35
Ala Leu Pro Ala Val Tyr Cys Arg Arg Cys Gly Arg Ser Gly Trp Gly
                        55
                                             60
    50
Val Gln Leu Ala Ser Thr Gly Asn Asn Leu Ser Glu Asn Asn Asp Ser
                                        75
                    70
65
Ile Arg Arg Thr His Ala Ala His Asp Gly Arg Phe Arg Ala Leu Leu
                                    90
                85
Ser Ala Pro Arg Glu Gly Ala Ser Ala Val Asp Thr Gly Glu Ala Thr
                                105
                                                     110
Leu Ser Leu Arg Trp Phe Asp Thr Val Asn Arg
                            120
        115
<210> 1871
 <211> 474
<212> DNA
 <213> Homo sapiens
<400> 1871
nntgcagege ecegaggteg atgtetecaa egtetttgee ageettgaca tggetagega
georgaeete georgeaece egetgaggea ageorgaeaa egacegggga acagetegeg
 120
 cattggatcg aggagtcgac gtcgacggtg tttttcggcg gcgccggaat gtccaccgaa
 tcaggtattc cggactttcg ctcggctggc gggctttaca ccactcagca tgacctgccc
 ttccccgcgg agtacatgct cagtcacage tgtttggttg.agcatcccgc ggagttcttc
 gacttctace geacetacet catecatect caggecagge ccaatgetgg teategtgeg
 360
```

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ttggttgcct tggagcaggc tggggaactt tcgacgatca ttacccagaa tattgacggc
ctgcaccaag aagctgggtc tcgtcaggtc attgagttgc atgggtcggt gcac
<210> 1872
<211> 125
<212> PRT
<213> Homo sapiens
<400> 1872
Met Thr Gly Glu Gln Leu Ala His Trp Ile Glu Glu Ser Thr Ser Thr
                                    10
                5
1
Val Phe Phe Gly Gly Ala Gly Met Ser Thr Glu Ser Gly Ile Pro Asp
                                25
           20
Phe Arg Ser Ala Gly Gly Leu Tyr Thr Thr Gln His Asp Leu Pro Phe
                           40
Pro Ala Glu Tyr Met Leu Ser His Ser Cys Leu Val Glu His Pro Ala
Glu Phe Phe Asp Phe Tyr Arg Thr Tyr Leu Ile His Pro Gln Ala Arg
                    70
Pro Asn Ala Gly His Arg Ala Leu Val Ala Leu Glu Gln Ala Gly Glu
                                   90
               85
Leu Ser Thr Ile Ile Thr Gln Asn Ile Asp Gly Leu His Gln Glu Ala
                                105
            100
Gly Ser Arg Gln Val Ile Glu Leu His Gly Ser Val His
                            120
<210> 1873
<211> 338
<212> DNA
<213> Homo sapiens
<400> 1873
nacgegtaga aatgaageee cagetggtea gagaceggaa ateeggtagt geaegggaeg
ggttccctcg gggatctcgg aggggagacc cccacccggg aggactggag gcagcgcctc
120
tecegeceeg gegegegeag cetattteee tetttecaag gggeeaatee eeacegegge
ccgcaggggg cgcgctcaag gcaaggtccg cggcgagaac ggtgcccagt gggagcgaag
ggcgaggcca gcccttggtc cttggccggc agttcgggtc ccgcctccaa attttagtat
gcatatgagt caccaggaaa gttttttgaa acaaattt
338
<210> 1874
<211> 93
 <212> PRT
 <213> Homo sapiens
<400> 1874
Ser Pro Ser Trp Ser Glu Thr Gly Asn Pro Vàl Val His Gly Thr Gly
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10
Ser Leu Gly Asp Leu Gly Gly Glu Thr Pro Thr Arg Glu Asp Trp Arg
                                25
Gln Arg Leu Ser Arg Pro Gly Ala Arg Ser Leu Phe Pro Ser Phe Gln
                           40
Gly Ala Asn Pro His Arg Gly Pro Gln Gly Ala Arg Ser Arg Gln Gly
                                           60
Pro Arg Arg Glu Arg Cys Pro Val Gly Ala Lys Gly Glu Ala Ser Pro
                   70
                                        75
Trp Ser Leu Ala Gly Ser Ser Gly Pro Ala Ser Lys Phe
               85
<210> 1875
<211> 366
<212> DNA
<213> Homo sapiens
<400> 1875
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ggcaatatct gcttctgctt cattacagaa gatgatggcg atagcttccg tgattttgga
aaattcacag aacccgtgat tgaagcactc cataaaatgg gagcaacagg ggcagagtta
caaggacgta acgacettet categacgga aagaaattet etggaaatge gatgtaetea
aacaatggcc gtttaacagc gcacggaaca ttaatgttgg atttagatgt gagcattttg
ccacaaattt tacgtccaaa acaagagaaa atcgagtcaa aaggaatcaa gtcggttcgt
360
tcacgc
366
<210> 1876
<211> 122
<212> PRT
<213> Homo sapiens
<400> 1876
Lys Leu Gly Val Gln Val Val Arg Arg Phe Ser Gly Gly Gly Ala Val
                                    10
                5
1
Tyr His Asp Met Gly Asn Ile Cys Phe Cys Phe Ile Thr Glu Asp Asp
           20
                                25
Gly Asp Ser Phe Arg Asp Phe Gly Lys Fhe Thr Glu Pro Val Ile Glu
       35
Ala Leu His Lys Met Gly Ala Thr Gly Ala Glu Leu Gln Gly Arg Asn
                        55
Asp Leu Leu Ile Asp Gly Lys Lys Phe Ser Gly Asn Ala Met Tyr Ser
                                        75
Asn Asn Gly Arg Leu Thr Ala His Gly Thr Leu Met Leu Asp Leu Asp
                                    90
Val Ser Ile Leu Pro Gln Ile Leu Arg Pro Lys Gln Glu Lys Ile Glu
           100
                                105
Ser Lys Gly Ile Lys Ser Val Arg Ser Arg
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120 115 <210> 1877 <211> 357 <212> DNA ' <213> Homo sapiens <400> 1877 acgcgtgagt ggtcgcaaat atgacgggca agaaacgctt agaaagaaac tacccattaa cgaggttatg caaattgcag aaatctctct atcggattgt ggctatatta tttcatcttt 120 ccaagetget ggaccaaggg ctgtagggtt gcaacgacct attatatetg aacatttttt tcaatttgac ccatttgata aacgacattg ggttgtctca catcatttac cacacgctgc gacagetget tteaetteeg gatttgaaga ttgegetgga ttagttteag atactgeegg atcgaacact cttgatggaa aggactatgt tgaaagctgc tgcaatgcta ttccacg 357 <210> 1878 <211> 96 <212> PRT <213> Homo sapiens <400> 1878 Met Gln Ile Ala Glu Ile Ser Leu Ser Asp Cys Gly Tyr Ile Ile Ser 5 10 15 1 Ser Phe Gln Ala Ala Gly Pro Arg Ala Val Gly Leu Gln Arg Pro Ile 25 20 Ile Ser Glu His Phe Phe Gln Phe Asp Pro Phe Asp Lys Arg His Trp 35 40 Val Val Ser His His Leu Pro His Ala Ala Thr Ala Ala Phe Thr Ser 50 Gly Phe Glu Asp Cys Ala Gly Leu Val Ser Asp Thr Ala Gly Ser Asn 75 70 Thr Leu Asp Gly Lys Asp Tyr Val Glu Ser Cys Cys Asn Ala Ile Pro <210> 1879 <211> 1062 <212> DNA <213> Homo sapiens <400> 1879 nacgegtgga tgctccttgg acggcttttt cgtggtagag ggttcccggt gcgcgccgca tccctgggaa gtagctgaag agaaggcaca ggaagagtcg cctccactga tggtctccct 120 gtccctccca caggctctga cgcccgctct gcggcttcgg tgtttgaaca ggccacagtc caggageget tacatteagg ageteegegt ageaectgee caaccaaact cageeeteeg

240

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ttaagatoot ggttocatgo ogcagtagga cagoaggooc aagtotgoac atoccagtga
tgcaccatgc caatagtgga taagttgaag gaggccctga aacccggccg caaggactcg
360
getgatgatg gagaactggg gaagettett geeteetetg ecaagaaggt cettttacag
420
aaaatcgagt tcgagccagc cagcaagagc ttctcctacc agctggaggc cttaaaagagc
aaatatgtgt tgctcaaccc caaaacagag ggagctagtc gccacaagag tggagatgac
ccaccggcca ggagacaggg cagtgaacac acgtatgaga gctgtggtga cggagtccca
geceegeaga aagtgetttt eeceaeggag egaetgtete tgaggtggga gegggtette
cgcgtgggcg caggactcca caaccttggc aacacctgct ttctcaatgc caccatccag
720
tgcttgacct acacaccacc tctagccaac tacctgctct ccaaggagca tgctcgcagc
tgccaccagg gaagettetg catgetgtgt gtcatgcaga accacattgt ccaggeette
840
gecaacageg geaacgecat caagecegte teetteatee gagacetgaa aaagategee
cgacacttcc gctttgggaa ccaggaggac gcgcatgagt tcctgcggta caccatcgac
960
gccatgcaga aagcctgcct gaatggctgt gccaagttgg atcgtcaaac gcaggctact
accttggtcc atcaaatttt tggagggtat ctcagatcac gc
1062
<210> 1880
<211> 252
<212> PRT
<213> Homo sapiens
<400> 1880
Met Pro Ile Val Asp Lys Leu Lys Glu Ala Leu Lys Pro Gly Arg Lys
                                    10
Asp Ser Ala Asp Asp Gly Glu Leu Gly Lys Leu Leu Ala Ser Ser Ala
                                                     30
            20
                                2.5
Lys Lys Val Leu Leu Gln Lys Ile Glu Phe Glu Pro Ala Ser Lys Ser
                                                45
                            40
        35
Phe Ser Tyr Gln Leu Glu Ala Leu Lys Ser Lys Tyr Val Leu Leu Asn
                        55
                                            60
Pro Lys Thr Glu Gly Ala Ser Arg His Lys Ser Gly Asp Asp Pro Pro
                                        75
                    70
65
Ala Arg Arg Gln Gly Ser Glu His Thr Tyr Glu Ser Cys Gly Asp Gly
                                    90
                85
Val Pro Ala Pro Gln Lys Val Leu Phe Pro Thr Glu Arg Leu Ser Leu
                                105
                                                    110
            100
Arg Trp Glu Arg Val Phe Arg Val Gly Ala Gly Leu His Asn Leu Gly
                                                125
                            120
Asn Thr Cys Phe Leu Asn Ala Thr Ile Gln Cys Leu Thr Tyr Thr Pro
                        135
                                            140
    130
Pro Leu Ala Asn Tyr Leu Leu Ser Lys Glu His Ala Arg Ser Cys His
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150
                                       155
Gln Gly Ser Phe Cys Met Leu Cys Val Met Gln Asn His Ile Val Gln
                                  170
               165
Ala Phe Ala Asn Ser Gly Asn Ala Ile Lys Pro Val Ser Phe Ile Arg
                               185
Asp Leu Lys Lys Ile Ala Arg His Phe Arg Phe Gly Asn Gln Glu Asp
                           200
                                               205
       195
Ala His Glu Phe Leu Arg Tyr Thr Ile Asp Ala Met Gln Lys Ala Cys
                     215
                                          220
Leu Asn Gly Cys Ala Lys Leu Asp Arg Gln Thr Gln Ala Thr Thr Leu
                230
                                    235
Val His Gln Ile Phe Gly Gly Tyr Leu Arg Ser Arg
               245
<210> 1881
<211> 358
<212> DNA
<213> Homo sapiens
<400> 1881
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tcaacacgaa gattaacgac gtctacaacc ctctcaacaa caatgtggac tggttaagca
cgagaattga tctgctacag caagatttgg acaccactcg caagaaggat ctaaaaccag
ccacategat egatatetge accateacat egategatag caagttegta gecatggaag
300
ataggttaca atcttataag gatatgcacg accgtttcac ctcacctatc aggcgata
<210> 1882
<211> 115
<212> PRT
<213> Homo sapiens
<400> 1882
Met Asp Ala Gly Lys Ala Thr Ser Ile Asp Val Lys Pro Gln Thr Ser
               5
                                  10
Gln Ile Pro Ala Glu Pro Gln Ser Leu Ala Glu Lys Lys Asp Glu Trp
                               25
Glu Ile Ala Tyr Ile Asn Thr Lys Ile Asn Asp Val Tyr Asn Pro Leu
       35
                         40
                                             45
Asn Asn Asn Val Asp Trp Leu Ser Thr Arg Ile Asp Leu Leu Gln Gln
                      55
Asp Leu Asp Thr Thr Arg Lys Lys Asp Leu Lys Pro Ala Thr Ser Ile
                   70
                                      75
Asp Ile Cys Thr Ile Thr Ser Ile Asp Ser Lys Phe Val Ala Met Glu
Asp Arg Leu Gln Ser Tyr Lys Asp Met His Asp Arg Phe Thr Ser Pro
                              105
          100
Ile Arg Arg
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115
<210> 1883
<211> 367
<212> DNA
<213> Homo sapiens
<400> 1883
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gggctgggag aatgatacta agacaccaga catcacatec attgctccca ttcccactat
120
tgctgaaggc gatgagtctg tatttgtcaa ctccaattca aacagctcga tggtgcctcc
tgtcctggag aacaatgctg ttgatctcac tgatgggctg acagatttgg aatcctatat
gaggtttctt atggatggcg gngcaagtga ttcaattgat agcettetga accttgatgg
atcacaggat cttggtagca atatggacct ctggaccttc gatgacatgc ccatcgctgg
360
cgatttn
367
<210> 1884
<211> 119
<212> PRT
<213> Homo sapiens
<400> 1884
Met Asn Leu His Ser Asp Gln Gly Ser Asn Ser Leu Gly Cys Ser Asp
                                    10
1
Leu Gly Trp Glu Asn Asp Thr Lys Thr Pro Asp Ile Thr Ser Ile Ala
            20
Pro Ile Pro Thr Ile Ala Glu Gly Asp Glu Ser Val Phe Val Asn Ser
                            40
Asn Ser Asn Ser Ser Met Val Pro Pro Val Leu Glu Asn Asn Ala Val
                        55
                                            60
Asp Leu Thr Asp Gly Leu Thr Asp Leu Glu Ser Tyr Met Arg Phe Leu
                    70
Met Asp Gly Gly Ala Ser Asp Ser Ile Asp Ser Leu Leu Asn Leu Asp
                                    90
                85
Gly Ser Gln Asp Leu Gly Ser Asn Met Asp Leu Trp Thr Phe Asp Asp
                                105
            100
Met Pro Ile Ala Gly Asp Xaa
        115
<210> 1885
<211> 392
<212> DNA
<213> Homo sapiens
<400> 1885
nacgcgtatt cgcaaagaat gtctttgcgg cacagagaca gtcgtcgtcc tcgacaccat
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gttcgacgat ctcggcatgt tgggaacccg gtgatttctc gcctgcggcg cacctcgtgg
ctgcgtagta cagctgctgt tgccgccggg gccgcgaccg gtaccgggtt ccaaccactg
180
aactggtgga tcctcgtcat tcccggtctc gctgcgctca tcctgctggt gcgcaacgcc
actggtcggg ccgcggcagg actggggtat ctcttcggca tcggtctgtt taccaccacc
attteetggg taggegteat eggeeegeeg gtggegatae tteteatege tgteatggeg
ttgtggtgtc tgctggccgg gtggacgatt cg
392
<210> 1886
<211> 130
<212> PRT
<213> Homo sapiens
<400> 1886
Xaa Ala Tyr Ser Gln Arg Met Ser Leu Arg His Arg Asp Ser Arg Arg
Pro Arg His His Val Arg Arg Ser Arg His Val Gly Asn Pro Val Ile
            20
                                25
Ser Arg Leu Arg Arg Thr Ser Trp Leu Arg Ser Thr Ala Ala Val Ala
       35
                            40
Ala Gly Ala Ala Thr Gly Thr Gly Phe Gln Pro Leu Asn Trp Trp Ile
                        55
                                            60
    50
Leu Val Ile Pro Gly Leu Ala Ala Leu Ile Leu Leu Val Arg Asn Ala
                    70
                                        75
65
Thr Gly Arg Ala Ala Ala Gly Leu Gly Tyr Leu Phe Gly Ile Gly Leu
                                    90
Phe Thr Thr Ile Ser Trp Val Gly Val Ile Gly Pro Pro Val Ala
                                105
                                                    110
Ile Leu Leu Ile Ala Val Met Ala Leu Trp Cys Leu Leu Ala Gly Trp
                            120
       115
Thr Ile
   130
<210> 1887
<211> 363
<212> DNA
<213> Homo sapiens
<400> 1887
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gacttettgg tgcagggaac tttatatece gatgtegteg agtetggtgg eggtgaggge
getgecaata teaagagtea ceataatgtt ggtgggetee etgaegaeet eeagtteagt
180
ctcgttgagc cattgcgcac cctctttaag gacgaggtgc gagccgtcgg actcgaactt
ggtctgcccg aggacatcgt ctggcgtcag cccttcccgg gcccggggct ggctatccgc
300
```

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attattggcg aagtcaccgc ggagcgtctg gaggtgctac gcactgccga tgccatcacg
360
cgt
363
<210> 1888
<211> 121
<212> PRT
<213> Homo sapiens
<400> 1888
Arg Glu Phe Ile Arg Thr Phe Glu Asp Val Ala Lys Arg Leu Asn Gly
                                    10
1
Asp Gln Pro Ile Asp Phe Leu Val Gln Gly Thr Leu Tyr Pro Asp Val
                                25
           20
Val Glu Ser Gly Gly Glu Gly Ala Ala Asn Ile Lys Ser His His
                            40
Asn Val Gly Gly Leu Pro Asp Asp Leu Gln Phe Ser Leu Val Glu Pro
                                           60
Leu Arg Thr Leu Phe Lys Asp Glu Val Arg Ala Val Gly Leu Glu Leu
                   70
Gly Leu Pro Glu Asp Ile Val Trp Arg Gln Pro Phe Pro Gly Pro Gly
                                    90
Leu Ala Ile Arg Ile Ile Gly Glu Val Thr Ala Glu Arg Leu Glu Val
                                105
           100
Leu Arg Thr Ala Asp Ala Ile Thr Arg
                            120
<210> 1889
<211> 530
<212> DNA
<213> Homo sapiens
<400> 1889
gcaccagatc tgctcatggc gcgcattgcg acggcaacgc agtcgatccg gcttgggtct
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acagegetet teggtgateg tategacatg gggetgggee gggeteeegg eggtgacatg
ctctccgccc atgccctcaa tcaggggcag gtcatccgcc ctgaggccat taattccctc
atcgccgaaa cggtagggtt cgtgcgcgaa atgctaccgt cgaagcatcc gtacgcaaag
300
gtcgtcgtga ccccggcagg tcagatccag ccacagacgt ggctgctggg atcgtcgggc
cagtcagcag cgtgggctgg tgagcagggt atggactacg cctacgccca gtttttcacc
gggcgccagg acaccgggat catggatcac taccgcgcgc acctgtccga cggcttcccc
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530
<210> 1890
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<211> 176
<212> PRT
<213> Homo sapiens
<400> 1890
Ala Pro Asp Leu Leu Met Ala Arg Ile Ala Thr Ala Thr Gln Ser Ile
                                   10
Arg Leu Gly Ser Gly Gly Val Met Ala Met His Tyr Gly Ser Leu Gln
                                                   30
           20
                               25
Ile Ala Glu Arg Phe Ser Thr Leu Thr Ala Leu Phe Gly Asp Arg Ile
                                               45
                           40
Asp Met Gly Leu Gly Arg Ala Pro Gly Gly Asp Met Leu Ser Ala His
                       55
   50
Ala Leu Asn Gln Gly Gln Val Ile Arg Pro Glu Ala Ile Asn Ser Leu
                                       75
                   70
Ile Ala Glu Thr Val Gly Phe Val Arg Glu Met Leu Pro Ser Lys His
                                   90
               85
Pro Tyr Ala Lys Val Val Val Thr Pro Ala Gly Gln Ile Gln Pro Gln
                                                   110
           100
                                105
Thr Trp Leu Leu Gly Ser Ser Gly Gln Ser Ala Ala Trp Ala Gly Glu
                           120
       115
Gln Gly Met Asp Tyr Ala Tyr Ala Gln Phe Phe Thr Gly Arg Gln Asp
                                           140
                       135
  130
Thr Gly Ile Met Asp His Tyr Arg Ala His Leu Ser Asp Gly Phe Pro
                                       155
                  150
Gly Arg Thr Leu Ser Ala Val Cys Val Ser Ala Ala Pro Thr Arg Pro
               165
                                   170
<210> 1891
<211> 423
<212> DNA
<213> Homo sapiens
<400> 1891
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cgtcaattta cagaggcagc ccagcttcct atcaactttc tggcctggct taacggtgta
180
atgggcaggg ggcaaggcct tgaccacact catgtttctc ccccggcctc ctccactctg
ggattttgta ccggtatggg gaggcactac ggttgcagat ttagcttttc agcgtggata
caagcaccca agtgtcccag accacagcag aaaccgtgtt getgeegttt ccaacctget
gatttggtct cttgctgccg ttctgaccaa cagaattgct actgactgac aaatcccttg
420
tgc
423
<210> 1892
<211> 121
<212> PRT
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10

<213> Homo sapiens <400> 1892 Met Trp Ala Pro Leu Pro Gln Ser Ser Ile Cys Thr Arg Leu Pro Thr Leu Gln Met Ala Pro Ala Cys Arg Glu Ile Gln Arg Gln Phe Thr Glu 20 35

25 Ala Ala Gln Leu Pro Ile Asn Phe Leu Ala Trp Leu Asn Gly Val Met 40 Gly Arg Gly Gln Gly Leu Asp His Thr His Val Ser Pro Pro Ala Ser 60 55 50 Ser Thr Leu Gly Phe Cys Thr Gly Met Gly Arg His Tyr Gly Cys Arg 75 65 Phe Ser Phe Ser Ala Trp Ile Gln Ala Pro Lys Cys Pro Arg Pro Gln

90 85 Gln Lys Pro Cys Cys Cys Arg Phe Gln Pro Ala Asp Leu Val Ser Cys 105 100

Cys Arg Ser Asp Gln Gln Asn Cys Tyr 115

<210> 1893 <211> 886 <212> DNA

<213> Homo sapiens

<400> 1893

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catgacgctg aactcgtcga aaagatatgg ggcgacgacc tgcgccacgt cggggtcgtt

gtggaataca tgggtggcat ggacgacctc gtcgggatcg tcgccgagtt taagcctggt

ccggggcatc gccttggcgt gttggttgac cacctcgttg ccgacaccaa agagtcacgg 240

gtagcggacg aagtacgtcg tggtgggtat agcgagtatg tcatgattac cggtcatcgc

tttattgaca tctggcaggc catcaaacct caacgaattg gccgtcaaga atggcctgag

360 gtcccgatgg acgaagactt caaactcggc accctgaagc gtctgggcct gcctcactcg

420 acccaagetg acgtcggtaa ggcctggcag gccatgctgg cacgagtgcg cgactggcac

gatttagacc cccgctttaa cacggagatg gagaaactta tcgatttcgt cacgcgtgac

540 catgtcgacg agctggacaa tggggagatg gcatgagtat tgacgtcgac acggtgtctg

600 acctcatccg ggatgtgagt gccagggtta tcgatccccg gttccggacc ctccacgatc

atcaaatcca ccagaaaaag cccggggact tcgttactga tgccgatcgt caggccgagt

720 gcgagctggg tgccgctgtg accaagtatg ccggcggtat tgtcgtgggg gaggaatcag

cettegeega cecaaceate éttgatgeeg ttteegatge tgacetggee tgggteateg 840 -

accccattga tggcactaag aacttcgtgc acgggtctgt tgatca

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886
<210> 1894
<211> 191
<212> PRT
<213> Homo sapiens
<400> 1894
Thr Gly Gly Ala Glu Pro Ala Arg Val Ala Leu Pro Ser Arg Ile Tyr
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Val Glu Gly Arg His Asp Ala Glu Leu Val Glu Lys Ile Trp Gly Asp
                           25
                                     . 30
Asp Leu Arg His Val Gly Val Val Glu Tyr Met Gly Gly Met Asp
                                        45
                     40
    35
Asp Leu Val Gly Ile Val Ala Glu Phe Lys Pro Gly Pro Gly His Arg
                  55
                                   60
Leu Gly Val Leu Val Asp His Leu Val Ala Asp Thr Lys Glu Ser Arg
       70
                         75
Val Ala Asp Glu Val Arg Arg Gly Gly Tyr Ser Glu Tyr Val Met Ile
                              90
Thr Gly His Arg Phe Ile Asp Ile Trp Gln Ala Ile Lys Pro Gln Arg
                           105
         100
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Val Gly Lys Ala Trp Gln Ala Met Leu Ala Arg Val Arg Asp Trp His
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Asp Leu Asp Pro Arg Phe Asn Thr Glu Met Glu Lys Leu Ile Asp Phe
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Glu Ser Met Val Glu Tyr Gly Thr Cys Met Cys Leu Val Lys Gly Ile
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                            40
Phe Tyr His Cys Ser Asn Asp Asp Glu Gly Asp Ser Tyr Ser Asp Asn
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Pro Cys Ser Cys Ser Gln Ser His Cys Cys Ser Arg Tyr Leu Cys Met
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Gly Ala Met Ser Leu Phe Leu Pro Cys Leu Leu Cys Tyr Pro Pro Ala
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Lys Gly Cys Leu Lys Leu Cys Arg Arg Cys Tyr Asp Trp Ile His Arg
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Thr Asp Cys Gly Lys Gly Phe Gly His Ala Ser Ser Leu Ser Lys His
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Arg Ala Ile His Arg Gly Glu Arg Pro His Arg Cys Leu Glu Cys Gly
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Arg Ala Phe Thr Gln Arg Ser Ala Leu Thr Ser His Leu Arg Val His
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Thr Gly Glu Lys Pro Tyr Gly Cys Ala Asp Cys Gly Arg Arg Phe Ser
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Gln Ser Ser Ala Leu Tyr Gln His Arg Arg Val His Ser Gly Glu Thr
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Pro Phe Pro Cys Pro Asp Cys Gly Arg Ala Phe Ala Tyr Pro Ser Asp
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Leu Arg Arg His Val Arg Ile His Thr Gly Glu Lys Pro Tyr Pro Cys
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Arg Arg Ala His Ser Gly Glu Cys Pro Tyr Val Cys Asp Gln Cys Gly
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Thr Gly Glu Lys Pro Tyr His Cys Pro Asp Cys Gly Arg Cys Phe Arg
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Arg Ser Arg Ser Leu Ala Asn His Arg Thr Thr His Thr Gly Glu Lys
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Pro His Gln Cys Pro Ser Cys Gly Arg Arg Phe Ala Tyr Pro Ser Leu
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Leu Ala Ser His Arg Arg Val His Ser Gly Glu Arg Pro Tyr Ala Cys
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Asp Leu Cys Ser Lys Arg Phe Ala Gln Trp Ser His Leu Ala Gln His
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Gln Leu Leu His Thr Gly Glu Lys Pro Phe Pro Cys Leu Glu Cys Gly
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Ile Phe Asp Leu Gly His Leu Tyr Glu Glu Ile Ser Gly Arg Leu Arg
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Pro Cys Ser Ser Thr Gly Ala Pro Ser Ser Thr Thr Arg Ile Arg Ala
Arg Ser Gly Arg Ser Thr Val Ser Ala Ala Thr Arg Ser Pro Ala Ala
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Arg Pro Arg Ser Ser Arg Arg Ser Pro Pro Trp Ser Thr Thr Pro Arg
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Arg Arg Ser Ala Ala Arg Gly Arg Ala Leu Thr Cys Ala Asn Gly Ala
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Cys Thr Gly Arg Thr Trp Trp Lys Arg Ser Pro Ile Pro Ser Pro Thr
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Ile Thr Trp Arg Arg Pro Gln Arg Ile Cys Ala Asn Pro Arg Leu Phe
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Cys Trp Phe Leu Cys Ala Cys Ala Ala Leu Gln Lys Ser Arg His Leu
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Leu Asp Gln Val Ile Pro Ala Gly Gln Pro Ser Trp Ala Asp Gln Glu
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Tyr Arg Gly Ser Phe Thr Cys Arg Phe Trp Gln Phe Gly Arg Trp Val
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Arg Arg Val Leu Leu Ala Ser Phe Leu Leu Ala Ala Val Arg Trp Leu
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Leu Leu Gly Ala Leu Ala Asp His Leu Ala Val Leu Leu Phe Ala Gln
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Val Leu His Ala Ala Thr Phe Ala Ser Phe His Ala Ser Ala Ile His
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Phe Val Gln Arg Ser Phe Gly Ala Arg Xaa Ala Arg Pro Gly Gln Ala
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Leu Tyr Ala Ala Leu Ala Gly Thr Gly Gly Ala Leu Gly Ala Leu Tyr
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Phe Trp Thr Gly Leu Arg Pro Met Thr Pro Asp Gly Thr Pro Ile Val
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Val Met Lys Gln Phe Ala Phe Val His Met Arg Glu Asn Ala Gly Ala
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Leu Arg Ala Ile Glu Ala Leu His Gly His Glu Leu Arg Pro Gly Arg
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Ala Leu Val Val Glu Met Ser Arg Pro Arg Pro Leu Asn Thr Trp Lys
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Ile Phe Val Gly Asn Val Ser Ala Ala Cys Thr Ser Gln Glu Leu Arg
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Ser Leu Phe Glu Arg Arg Gly Arg Val Ile Glu Cys Asp Val Val Lys
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Asp Tyr Ala Phe Val His Met Glu Lys Glu Ala Asp Ala Lys Ala Ala
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Ile Ala Gln Leu Asn Gly Lys Glu Val Lys Gly Lys Arg Ile Asn Val
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Glu Leu Ser Thr Lys Gly Gln Lys Lys Gly Pro Gly Leu Ala Val Gln
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Ser Gly Asp Lys Thr Lys Lys Pro Gly Ala Gly Asp Thr Ala Phe Pro
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_		m 1	180	~ 1	Db -		<i>-</i> 22	185	21-	7	61 -	Dwa	190	Dwa	Dwa
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~ 1-	Db -	195	3	3	3	Com		tan	7	71	cor		B~o	7 ~~	7.1 -
Pne		GIA	Arg	Asp	Arg		PIO	Leu	Arg	Arg	220	PLO	PIO	Arg	Ala
c	210	17.1	710	Dwo	Leu	215	21-	Cln	Dvo	717		Time	7 20	בות	Gln.
	Tyr	vai	Ald	PIO		LIIL	MIG	GIII	PIO		TILL	IAT	ura	АІА	240
225		w-1		T 4	230 Gly	חות	212	Ma rec	71	235	C15	Dro	C0.T	712	
PIO	ser	vai	Ser	245	Gry	ALG	Аца	IYL	250	ATG	GIII	FIU	Ser	255	361
7	<i>c</i> 1	u a 1	C1		Arg	Thr	Cln.	Dro		Thr	λla	Gla	A 1 a		Sor
Leu	GIY	val		ıyı	Arg	1111	GIII	265	Mec	1111	AIA	GIII	270	VIG	261
T	7~~	21-	260	Dvo	Ser	37-3	cor		Gly	71-	Dro	Ture		Gly	Gla
IAT	ALG	275	GIII	FIU	SEI	vai	280	Deu	Gry	A1 a	110	285	~- y	OI,	0111
Lau	- ומ		Dro	Sar	Ser	Gln		Δla	λla	בומ	Ser		Len	Glv	Pro
Leu	290	361	FIO	361	361	295	Der	ліа	n I a	ALG	300	561	DCu	G.	110
Tur		Gly	Δla	Gln	Pro		Δla	Ser	Δla	Len		Ser	Tvr	Glv	Glv
305	Сту	GIY	AIA	GIII	310	Ser	лта	561	ALU	315	JCI	501	. , .	O. J	320
	בומ	al a	λla	Δla	Ser	Ser	T.em	Asn	Ser		Glv	Δla	Gln	Glv	
0111	AIG	AIG	AIG	325	561				330	-1-	U -7		·	335	001
Ser	Len	Ala	Ser		Gly	Asn	Gln	Pro		Ser	Tvr	Glv	Ala		Ala
002		,,,,,	340	- / ~	1			345			-1-	1	350		
Ala	Ser	Ser	Tvr	Glv	Val	Arg	Ala		Ala	Ser	Ser	Tyr	Asn	Thr	Gln
		355	-7-	1			360					365			
Glv	Ala		Ser	Ser	Leu	Gly	Ser	Tyr	Gly	Ala	Gln	Ala	Ala	Ser	Tyr
	370					375		•	•		380				•
Gly	Ala	Gln	Ser	Ala	Ala	Ser	Ser	Leu	Ala	Tyr	Gly	Ala	Gln	Ala	Ala
385					390					395					400
Ser	Tyr	Asn	Ala	Gln	Pro	Ser	Ala	Ser	Tyr	Asn	Ala	Gln	Ser	Ala	Pro
				405					410					415	
Tyr	Ala	Ala	Gln	Gln	Ala	Ala	Ser	Tyr	Ser	Ser	Gln	Pro	Ala	Ala	Tyr
			420					425					430		
Val	Ala	Gln	Pro	Ala	Thr	Ala	Ala	Ala	Tyr	Ala	Ser		Pro	Ala	Ala
		435					440					445			
Tyr		Ala	Gln	Ala	Thr		Pro	Met	Ala	Gly		Tyr	Gly	Ala	Gin
	450					455	_			~3	460	~1			
	Val	Val	Gln	Thr	Gln	Leu	Asn	ser	ıyr		Ala	GIN	АТА	ser	
465			61	C	470	01		C1 -	C	475	N1 -	71-	71-	Th.	480
GIY	Leu	ser	GIY		Tyr	GLY	АТА	GIII	490	Ala	ALA	ATA	ALA	495	GIA
C	T	01	A 1 a	485	Ala	212	m	Cl v		Gla	Dro	Car	λla		Len
261	IYI	GIY	500	HIA	ALA	MIG	TÀT	505	AIA	GIII	PIO	361	510	1111	Leu
712	7.3 -	Dro		r.va	Thr	Gln	Sar		בומ	Car	Len	Δla		Ser	Tur
MIG	Ala	515	1 7 1	Arg	1111	GIII	520	361	A14	361	Dea	525		501	-7-
Δla	Δla		Gln	His	Pro	Gln		Ala	Ala	Ser	Tvr		Glv	Gln	Pro
	530	· · · ·	· · · ·			535					540	3	2		
Glv		Ala	Tvr	Asp	Gly		Glv	Gln	Pro	Ser		Ala	Tvr	Leu	Ser
545	,		- 1 -		550		1			555			-		560
	Ser	Gln	Glv	Ala	Val	Ala	Asn	Ala	Asn		Thr	Pro	Pro	Pro	
				565					570					575	-
Glu	Arg	Thr	Arg		Ser	Pro	Pro	Arg		Ser	Tyr	Asp	Asp	Pro	Tyr
			580					585			-	_	590		-
		717	Val	Ala	Met	Ser	Lvs	Ara	Tvr	GÌy	Ser	Asp	Arq	Arq	Leu

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600
        595
Ala Glu Leu Ser Asp Tyr Arg Arg Leu Ser Glu Ser Gln Leu Ser Phe
   610
                      615
                                 620
Arg Arg Ser Pro Thr Lys Ser Ser Leu Asp Tyr Arg Arg Leu Pro Asp
                 630
                                       635
Ala His Ser Asp Tyr Ala Arg Tyr Ser Gly Ser Tyr Asn Asp Tyr Leu
               645
                                  650
Arg Ala Ala Gln Met His Ser Gly Tyr Gln Arg Arg Met
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           660
<210> 1911
<211> 339
<212> DNA
<213> Homo sapiens
<400> 1911
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120
cgcatcgacg atgaaagctt cctccgccca gttgagccga cccaagccgc accgtgggcg
gcagcgcata gccagcaggc gtggtggaat cacctgaagt acctgegcac cgccgcgcgt
gaagcactgg tggtcccgct cgtcattgag gtggagggga aattcgcagg gcaggtaacc
ctgggaaaca ttcagcatgg cagcattcgc gattgctgg
339
<210> 1912
<211> 113
<212> PRT
<213> Homo sapiens
<400> 1912
Xaa Gly Trp Pro Glu Ser Thr Pro Ser Val Gln Leu Pro Ser Ser Ser
                5
                                   10
Val Phe Pro Ser Gly Ala Arg Met Arg Leu Arg Pro Leu Leu Arg Ser
           20
                                                   30
                               25
Asp Gly His Glu Trp Arg Arg Gln Arg Ile Asp Asp Glu Ser Phe Leu
                           40
Arg Pro Val Glu Pro Thr Gln Ala Ala Pro Trp Ala Ala Ala His Ser
                                          60
                       55
Gln Gln Ala Trp Trp Asn His Leu Lys Tyr Leu Arg Thr Ala Ala Arg
                   70
                                       75
Glu Ala Leu Val Val Pro Leu Val Ile Glu Val Glu Gly Lys Phe Ala
               85
                                   90
Gly Gln Val Thr Leu Gly Asn Ile Gln His Gly Ser Ile Arg Asp Cys
           100
                               105
                                                   110
Trp
<210> 1913
<211> 767
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<212> DNA
<213> Homo sapiens
<400> 1913
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atgcgaaatg ggggatttgt caccctcagg gaccggaagg aagggagcag tccgatggca
gegecagtae tegatetegt ecteceagee ttgteegaaa ceteegeeaa teteategge
180
cagaggttgc gccagggatg tcacacctcc atccccacat cgaatctacg gtgagcttcg
teccagetgt egggeagtac aaggeacete ggateaaget tteetggegt gaactggtee
tggtacccat caatgccacc cacctgcact ccaatccccc acaagttgtc caacacgccg
cagaattgcg tegeageeac eeggacettg ceateaaggt ggeeegeeec aceggaceag
420
caccygtect ecteaacete gtegatacge gattgegtet ggeageteat egegteeatg
cccaggagct ggactcactc gtattgtctt cccctgatgg cggcgattta cgtggctcgg
caatgetgte caggetgace eggetgtggt cecageacea ceacetteeg gteegeateg
ccaccaatcg tggtggggct actgcggtcg aggaggtcgt cgcccgcctg cgacaggagg
ggcgccgtca tatcgcagtg ggaagcctgt ggatttgcga cgacgagaat ttccgcattc
atactogoca ggotttgcat googgtgcog aggttgtogo ogcacog
767
<210> 1914
<211> 190
<212> PRT
<213> Homo sapiens
<400> 1914
Met Ser His Leu His Pro His Ile Glu Ser Thr Val Ser Phe Val Pro
                                    10
                 5
Ala Val Gly Gln Tyr Lys Ala Pro Arg Ile Lys Leu Ser Trp Arg Glu
                                                     30
                                25
            20
 Leu Val Leu Val Pro Ile Asn Ala Thr His Leu His Ser Asn Pro Pro
                             40
                                                 45
        35
Gln Val Val Gln His Ala Ala Glu Leu Arg Arg Ser His Pro Asp Leu
                                             60
                        55
 Ala Ile Lys Val Ala Arg Pro Thr Gly Pro Ala Pro Val Leu Leu Asn
                                         75
65
Leu Val Asp Thr Arg Leu Arg Leu Ala Ala His Arg Val His Ala Gln
                85
Glu Leu Asp Ser Leu Val Leu Ser Ser Pro Asp Gly Gly Asp Leu Arg
                                                     110
                                 105
            100
 Gly Ser Ala Met Leu Ser Arg Leu Thr Arg Leu Trp Ser Gln His His
                             120
                                                 125
 His Leu Pro Val Arg Ile Ala Thr Asn Arg Gly Gly Ala Thr Ala Val
```

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135
    130
Glu Glu Val Val Ala Arg Leu Arg Gln Glu Gly Arg Arg His Ile Ala
                                        155
Val Gly Ser Leu Trp Ile Cys Asp Asp Glu Asn Phe Arg Ile His Thr
                                    170
                165
Arg Gln Ala Leu His Ala Gly Ala Glu Val Val Ala Ala Pro
                                185
<210> 1915
<211> 571
<212> DNA
<213> Homo sapiens
<400> 1915
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aggtgtgagc gcacgatggg cagtcacgcc gcacacacgc tctgctcatg tccctcccca
ggaccetetg accgggeaca agggeagetg tgaggacaag gecacageca caaaccaace
tggcacacac ggctcagggc gaggcactgc cccatggggc tgcatgatcc acgctcacag
gtgtcattgt ctatgctcag gggggcttgg caccatggga aacccaccca gaacacatgg
300
agaagccaca gcacaacctc agcgcccgcc atgcaggacc ctgggtctca cccattgcac
360
ccaccgtgcg ggacccctgc gcctcacccg gaacatecac agtgtgggac tgctgcgtct
420
cacccactgc acctgccgtg caggatecet gagteteace egeegeacee geegtgeggg
atcoctgagt ctcaccegcc gcaccegccg tacctgccgc atccgccatg cgggacccct
gegteteace cacegeacee geogtgeggg a
<210> 1916
<211> 119
<212> PRT
<213> Homo sapiens
<400> 1916
Met Gly Leu His Asp Pro Arg Ser Gln Val Ser Leu Ser Met Leu Arg
1
                                    10
Gly Ala Trp His His Gly Lys Pro Thr Gln Asn Thr Trp Arg Ser His
                                25
                                                    30
Ser Thr Thr Ser Ala Pro Ala Met Gln Asp Pro Gly Ser His Pro Leu
                            40
His Pro Pro Cys Gly Thr Pro Ala Pro His Pro Glu His Pro Gln Cys
Gly Thr Ala Ala Ser His Pro Leu His Leu Pro Cys Arg Ile Pro Glu
                    70
                                        75
Ser His Pro Pro His Pro Pro Cys Gly Ile Pro Glu Ser His Pro Pro
                85
                                    90
His Pro Pro Tyr Leu Pro His Pro Pro Cys Gly Thr Pro Ala Ser His
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100
                                105
                                                    110
Pro Pro His Pro Pro Cys Gly
       115
<210> 1917
<211> 360
<212> DNA
<213> Homo sapiens
<400> 1917
nnacgcgtga ccggcgaaga tctccgcacc ctatctgccg ggtacacgcc gggtgattcc
gatatgtett gggetgeeat cacettgtgg egeggtgteg ttgeeteege ettggaeegt
120
catccctatg gcccggtgaa gtcggtaaag gtagcaggtc cggccggcca cccagccccg
gatttcgccg ccggatggtt gctcgaccgc ttggcagttc ccgtacatcg cacagtggcc
gactececaa ggagacaett eeeggtgaet eatttgeagt teaateggga gacaaeceae
gtagacgtcg atgtcattga cgagcgcacg gttcgtgtat gtgttccggg ttcgccggaa
360
<210> 1918
<211> 120
<212> PRT
<213> Homo sapiens
<400> 1918
Xaa Arg Val Thr Gly Glu Asp Leu Arg Thr Leu Ser Ala Gly Tyr Thr
                                    10
Pro Gly Asp Ser Asp Met Ser Trp Ala Ala Ile Thr Leu Trp Arg Gly
                                25
            20
Val Val Ala Ser Ala Leu Asp Arg His Pro Tyr Gly Pro Val Lys Ser
                                                45
                            40
Val Lys Val Ala Gly Pro Ala Gly His Pro Ala Pro Asp Phe Ala Ala
                       55
                                            60
    50
Gly Trp Leu Leu Asp Arg Leu Ala Val Pro Val His Arg Thr Val Ala
                                        75
                    70
Asp Ser Pro Arg Arg His Phe Pro Val Thr His Leu Gln Phe Asn Arg
                                    90
Glu Thr Thr His Val Asp Val Asp Val Ile Asp Glu Arg Thr Val Arg
            100
                                105
Val Cys Val Pro Gly Ser Pro Glu
<210> 1919
<211> 354
<212> DNA
<213> Homo sapiens
<400> 1919
nneggeegea getgtgteca etgegetgte cetgecacet eggeeatetg cetetetet
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ccaggetgea gecatecete etgeactget gaggeetgge caegegeate neggeeaege
ccacctccat cctctttgcc ccttactaaa cactgggagc ccgcccgccc gcgacaggcc
aggccagegg gaaggtgtag acgaacagec caaaggatte ageagtgtaa gtaececace
tacgcactta caaagtgcag gccaccgccc agccccacct ccagacacag gcggaggcca
agetegeggg cacegtatea tecegtgeeg tetecaceet accectgeea attg
<210> 1920
<211> 118
<212> PRT
<213> Homo sapiens
<400> 1920
Xaa Gly Arg Ser Cys Val His Cys Ala Val Pro Ala Thr Ser Ala Ile
                                    10
Cys Leu Ser Leu Pro Gly Cys Ser His Pro Ser Cys Thr Ala Glu Ala
           20
Trp Pro Arg Ala Ser Arg Pro Arg Pro Pro Pro Ser Ser Leu Pro Leu
Thr Lys His Trp Glu Pro Ala Arg Pro Arg Gln Ala Arg Pro Ala Gly
                                            60
    50
Arg Cys Arg Arg Thr Ala Gln Arg Ile Gln Gln Cys Lys Tyr Pro Thr
                    70
Tyr Ala Leu Thr Lys Cys Arg Pro Pro Pro Ser Pro Thr Ser Arg His
                                    90
Arg Arg Arg Pro Ser Ser Arg Ala Pro Tyr His Pro Val Pro Ser Pro
                                105
            100
Pro Tyr Pro Cys Gln Leu
        115
<210> 1921
<211> 357
<212> DNA
<213> Homo sapiens
<400> 1921
gaattcatct ggaggcagag agatggggaa gcgggtggga gaagagcaag aacggaaact
60
atttttaata caaatccagt catggtattg tatacacage agectetgte ttecagaaac
ctacacggcc gccacaccaa agttaatgcc accaggcgtc atcacacaga tgtgaggtgc
aggtgccact ccacagccgt gggcagacct gggagcccag ctcctcctgg tttcaccctc
cacactgoco accocatoot tototocoag totocactoo atogaagoot cocagatgae
ttcatgtggg gacaggagaa ctacagatca tggctgagaa gggcgcngtg tngtcca
357
<210> 1922
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<211> 92
<212> PRT
<213> Homo sapiens
<400> 1922
Met Val Leu Tyr Thr Gln Gln Pro Leu Ser Ser Arg Asn Leu His Gly
                                   10
Arg His Thr Lys Val Asn Ala Thr Arg Arg His His Thr Asp Val Arg
          20
                               25
Cys Arg Cys His Ser Thr Ala Val Gly Arg Pro Gly Ser Pro Ala Pro
                                               45
                           40
Pro Gly Phe Thr Leu His Thr Ala His Pro Ile Leu Leu Ser Gln Ser
                       55
  50
Pro Leu His Arg Ser Leu Pro Asp Asp Phe Met Trp Gly Gln Glu Asn
                                        75
                   70
Tyr Arg Ser Trp Leu Arg Arg Ala Xaa Cys Xaa Pro
               85
<210> 1923
<211> 368
<212> DNA
<213> Homo sapiens
<400> 1923
nattnaatta tggtgagaaa aggettatge gttgcattge tegtgettgt cacaetgtea
ggtagtgcac agaagaaaga atggttcagc aacattaaac tctcaggcta tggaatgacc
120
cagtatcaat atactgatca agagggaagc aaaggccatt catttaatct gcgattgttc
ccgttgcctt taaacggacg tatcttaaat gacttttatt ggaaggcaca ggcccaattc
aatggaaaca catcgacatt gggaagcagt ccacgtcttg tagacctatt tgtagagtgg
cagaaatatg attatttcaa ggtgaagtta ggccagttta agcgaccatt cacgtttgaa
360
aatcccag
368
<210> 1924
<211> 119
<212> PRT
<213> Homo sapiens
<400> 1924
Met Val Arg Lys Gly Leu Cys Val Ala Leu Leu Val Leu Val Thr Leu
                                    10
Ser Gly Ser Ala Gln Lys Lys Glu Trp Phe Ser Asn Ile Lys Leu Ser
           20
                                25
Gly Tyr Gly Met Thr Gln Tyr Gln Tyr Thr Asp Gln Glu Gly Ser Lys
Gly His Ser Phe Asn Leu Arg Leu Phe Pro Leu Pro Leu Asn Gly Arg
Ile Leu Asn Asp Phe Tyr Trp Lys Ala Gln Ala Gln Phe Asn Gly Asn
```

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65
                    70
Thr Ser Thr Leu Gly Ser Ser Pro Arg Leu Val Asp Leu Phe Val Glu
                                   90
               85
Trp Gln Lys Tyr Asp Tyr Phe Lys Val Lys Leu Gly Gln Phe Lys Arg
                                105
           100
Pro Phe Thr Phe Glu Asn Pro
       115
<210> 1925
<211> 427
<212> DNA
<213> Homo sapiens
<400> 1925
actagtgttt ccagcaggca gcgatttaat tgttcttgca ttgaaaccca gtgtggcaag
ccccctgtg atttgagget aatccctccc caccetgttc tggcacatgt geggtgccca
gggctccccc caggctgtga gcagataaag ccctgcgtgg cttcacaaca gtgactggtt
ctgagaaaca ggtccttgta caagcgacag ggagtgctca caccagatgt ggcagcccct
240
ccacgccagg ctgtgtggtg cagccgcctg gtatatgtgt ccatcgctga tgaaaacagc
gttgtgtggt gcatgactgt tgtctgtttt cttcatggaa acaaggaaac ctaagcatta
aaacaacacc atccacgtct ggttccttag agcaaatgga agcaccaggc tctggtgcac
420
ggcgcgc
427
<210> 1926
<211> 104
<212> PRT
<213> Homo sapiens
<400> 1926
Met His His Thr Thr Leu Phe Ser Ser Ala Met Asp Thr Tyr Thr Arg
                                   10
Arg Leu His His Thr Ala Trp Arg Gly Gly Ala Ala Thr Ser Gly Val
           20
                               25
Ser Thr Pro Cys Arg Leu Tyr Lys Asp Leu Phe Leu Arg Thr Ser His
       35
                           40
                                               45
Cys Cys Glu Ala Thr Gln Gly Phe Ile Cys Ser Gln Pro Gly Gly Ser
   50
                       55
                                            60
Pro Gly His Arg Thr Cys Ala Arg Thr Gly Trp Gly Gly Ile Ser Leu
                                       75
                   70
Lys Ser Gln Gly Gly Leu Pro His Trp Val Ser Met Gln Glu Gln Leu
                                   90
               85
Asn Arg Cys Leu Leu Glu Thr Leu
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<210> 1927
<211> 516
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1467

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<212> DNA
<213> Homo sapiens
<400> 1927
nntctagaag actccaccta cttttcccca gactttcagc tctattctgg gaggcatgaa
acatctgctt tgacggtgga ggcaaccagt agcatcaggg aaaaagttgt tgaagatcct
ctttgtaact tccactcccc aaacttcctg aggatctcag aggtggaaat gagaggttcc
gaggatgcgg cagctggaac agtattgcag cggctgatcc aggaacaact gcggtatggc
accccaaccg agaacatgaa cttgctggcc attcagcacc aggccacagg gagtgcagga
ccagcccatc ctacaaacaa cttttcttcc acggaaaacc tcactcaaga agacccacaa
atggtctacc agtcagcacg ccaagaaccg cagggtcaag aacaccagng tgganncaat
acggtgatgg agaaacaggt ccggtccacg cagcctcagc agaacaacga ggaactgccc
acttacgagg aggccaaagc acagcccttc acgcgt
516
<210> 1928
<211> 172
<212> PRT
<213> Homo sapiens
<400> 1928
Xaa Leu Glu Asp Ser Thr Tyr Phe Ser Pro Asp Phe Gln Leu Tyr Ser
                                   10
                5
Gly Arg His Glu Thr Ser Ala Leu Thr Val Glu Ala Thr Ser Ser Ile
                                25
Arg Glu Lys Val Val Glu Asp Pro Leu Cys Asn Phe His Ser Pro Asn
                                                45
                            40
        35
Phe Leu Arg Ile Ser Glu Val Glu Met Arg Gly Ser Glu Asp Ala Ala
                                           60
                        55
Ala Gly Thr Val Leu Gln Arg Leu Ile Gln Glu Gln Leu Arg Tyr Gly
                   70
                                       75
Thr Pro Thr Glu Asn Met Asn Leu Leu Ala Ile Gln His Gln Ala Thr
                                   90
                85
Gly Ser Ala Gly Pro Ala His Pro Thr Asn Asn Phe Ser Ser Thr Glu
                                105
            100
Asn Leu Thr Gln Glu Asp Pro Gln Met Val Tyr Gln Ser Ala Arg Gln
                                                125
                            120
Glu Pro Gln Gly Gln Glu His Gln Xaa Gly Xaa Asn Thr Val Met Glu
                                            140
                        135
Lys Gln Val Arg Ser Thr Gln Pro Gln Gln Asn Asn Glu Glu Leu Pro
                                        155
                    150
Thr Tyr Glu Glu Ala Lys Ala Gln Pro Phe Thr Arg
                                    170
                165
 <210> 1929
 <211> 843
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<212> DNA
<213> Homo sapiens
<400> 1929
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tetecaggta catgteette aaggagaaat acaetteetg geetgggeet gggeeagggg
cettetggge ettgtetgga gtgcccaeag cagaggetgg etteetggta etatetgtge
cagaggaccc aggcccccgt gcagccctgc ctctgggctg ggtctgaacc tgctccacgc
240
ccacgggccc ctgagtccca caggagtcag gctcgtctga gctggggatg cagttttctg
300
aagaacggcg gctttgggct gccttctcta actctggctt ccgcaccttg cttggattcc
teatettet ttttettett ggeeceaete teetetttga gggetetetg aggeeceage
tocatggcgt cacagatgta tgtcagcaag ccatgetete egteetetee attetegggg
geageeteee egitggiggi cactieteea gaageaaact gitgateagg eeeaaaeetg
540
agtgctgagc agtctcagtc tctccctcct gccaagccgc cagggtccca ccctcaggct
ccctggtagg gaccgagggg cccggcgctt gagccccgct caatcgccgc tttcgctgga
660
agcggtcggg gctgagcttg cgcagagtgt cgacctcccc aggcaccgcc ttctcgtgct
720
tocagetetg etegateteg egeagetttg eegeageett gegetteaac ttggegaace
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840
caa
843
<210> 1930
<211> 120
<212> PRT
<213> Homo sapiens
<400> 1930
Leu Pro Gly Cys Ser Pro Gly Thr Cys Pro Ser Arg Arg Asn Thr Leu
1
                                    10
Pro Gly Leu Gly Leu Gly Gln Gly Pro Ser Gly Pro Cys Leu Glu Cys
                                25
                                                    30
            20
Pro Gln Gln Arg Leu Ala Ser Trp Tyr Tyr Leu Cys Gln Arg Thr Gln
                            40
Ala Pro Val Gln Pro Cys Leu Trp Ala Gly Ser Glu Pro Ala Pro Arg
Pro Arg Ala Pro Glu Ser His Arg Ser Gln Ala Arg Leu Ser Trp Gly
Cys Ser Phe Leu Lys Asn Gly Gly Phe Gly Leu Pro Ser Leu Thr Leu
               85
                                    90
Ala Ser Ala Pro Cys Leu Asp Ser Ser Ser Phe Phe Phe Leu Ala
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110
                                105
           100
Pro Leu Ser Ser Leu Arg Ala Leu
       115
<210> 1931
<211> 719
<212> DNA
<213> Homo sapiens
<400> 1931
acgcgtaggc ctgagccgct ccacagccct ggggagggca gaaaaggagg aaagtaggca
gtgcaagaaa caggaggaaa ccccccagag cgcagcctcc tggaagcgga agggagcact
120
gaagaggagg tggttagtgg tgtcagaagc tgctgagaag ccagttagat aaagcggaga
agettectae taggacaget tecteccage ccagtgtgge caegetggtg tecteggtga
ccagacacgt ggccatgaat ttctcagtgt gctttattgt tgattaaatg cagtcggctc
acgaggctga ctttggaaac aggaggtccg tgggtcgtgg aataagaaag ggcatcatgg
360
ttgcagagga agggaaggaa gcccacggct gccttgggga gctttctgaa aggcaggtct
gatcatgcct ctctgggcta cggtctcctc acggtggctc ctggttggaa ctgaagtggt
480
ccccttggtc cctctcccc atctcagcat tagccaggac ttttggcttg gcggccccag
cagggetgee ecettgeaac acttettte ceacatgate gtgeetteea aacetaette
600
cagegtegee etetteaggg ageettteat aaceacetet ecetteeact ggetaaagat
gaggttgagc aactgcagga cttgggacct tgttcctgcc cctgtggctg cctggatcc
<210> 1932
<211> 98
<212> PRT
<213> Homo sapiens
<400> 1932
Met Pro Leu Trp Ala Thr Val Ser Ser Arg Trp Leu Leu Val Gly Thr
                                    10
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Glu Val Val Pro Leu Val Pro Leu Ser His Leu Ser Ile Ser Gln Asp
                                 25
            20
Phe Trp Leu Gly Gly Pro Ser Arg Ala Ala Pro Leu Gln His Phe Phe
                             40
         35
 Ser His Met Ile Val Pro Ser Lys Pro Thr Ser Ser Val Ala Leu Phe
                                             60
                         55
Arg Glu Pro Phe Ile Thr Thr Ser Pro Phe His Trp Leu Lys Met Arg
                                         75
                     70
 Leu Ser Asn Cys Arg Thr Trp Asp Leu Val Pro Ala Pro Val Ala Ala
                                     90
                 85
 Trp Ile
```

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<210> 1933
<211> 295
<212> DNA
<213> Homo sapiens .
<400> 1933
ggcgccgagc tgtgggcggc catggagcgc atgcctgccg acctgattat cctcgacctg
60
atgctgccgg gggataacgg cctcttgctg tgccagcgc tgcgccagca atacgcaaca
120
ccagtgatca tgctgaccgc catgggcgaa ctgagtgatc gcgtgggggg cctggaaatg
180
ggcgccgatg actacctgaa caaacctttc gatgcccgtg aattacttgc ccgggtgcgc
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295
<210> 1934
<211> 98
<212> PRT
<213> Homo sapiens
<400> 1934
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Ile Leu Asp Leu Met Leu Pro Gly Asp Asn Gly Leu Leu Leu Cys Gln
                                25
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Arg Leu Arg Gln Gln Tyr Ala Thr Pro Val Ile Met Leu Thr Ala Met
                            40
Gly Glu Leu Ser Asp Arg Val Gly Gly Leu Glu Met Gly Ala Asp Asp
                        55
   50
Tyr Leu Asn Lys Pro Phe Asp Ala Arg Glu Leu Leu Ala Arg Val Arg
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Ala Val Leu Arg Pro Ala Cys Glu Asn Arg Pro Thr Leu Gly Asp Val
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Ser Arg
<210> 1935
<211> 298
<212> DNA
<213> Homo sapiens
<400> 1935
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cccategect eggegttegt gattgeeeag acccaatege tgteggagtt ttteeteagt
ggetegatgg ccaaggtget gacettgteg teggtgatte tgateetgat getgegeeeg
240
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caagggttgt tctccatcaa agtgcgcaag taaaggcgag cagataaggg tttaagca
298
<210> 1936
<211> 90
<212> PRT
<213> Homo sapiens
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                                25
Gly Gly Ala Gln Ser Leu Phe Gly Pro Ile Ala Ser Ala Phe Val Ile
                                                45
                            40
       35
Ala Gln Thr Gln Ser Leu Ser Glu Phe Phe Leu Ser Gly Ser Met Ala
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                                            60
Lys Val Leu Thr Leu Ser Ser Val Ile Leu Ile Leu Met Leu Arg Pro
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Gln Gly Leu Phe Ser Ile Lys Val Arg Lys
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<210> 1937
<211> 513
<212> DNA
<213> Homo sapiens
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tataaatgta gggaaatagt gagagcette acagttteca gtttettteg aaaacatgga
aaaatgcata ctggagaaaa acgctatgaa tgtaaatact gtggaaaacc tatcgattat
cccagtttat ttcaaattca tgttagaact cactctggag aaaaaacccta caaatgtaaa
caatgtggta aagcetteat tteegeaggt taegttegga cacatgaaat cagateteae
gcgctggaga aatcccacca atgtcaggaa tgtgggaaga aactcagttg ttccagttcc
420
cttcacagac atgaaagaac tcatagtgga ggaaaactct acgaatgtca aaaatgtgac
caagtettta gatgteecac gteeetteac geg
513
<210> 1938
<211> 171
<212> PRT
<213> Homo sapiens
<400> 1938
Ala Arg Arg Thr Val Thr Pro Thr Arg Lys Arg Pro Tyr Glu Cys Lys
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10

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Val Cys Gly Lys Ala Phe Asn Ser Pro Asn Leu Phe Gln Ile His Gln
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Arg Thr His Thr Gly Lys Arg Ser Tyr Lys Cys Arg Glu Ile Val Arg
                            40
                                                45
Ala Phe Thr Val Ser Ser Phe Phe Arg Lys His Gly Lys Met His Thr
                                            60
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Gly Glu Lys Arg Tyr Glu Cys Lys Tyr Cys Gly Lys Pro Ile Asp Tyr
Pro Ser Leu Phe Gln Ile His Val Arg Thr His Ser Gly Glu Lys Pro
                                    90
Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Ile Ser Ala Gly Tyr Val
           100
                                105
Arg Thr His Glu Ile Arg Ser His Ala Leu Glu Lys Ser His Gln Cys
                                                125
        115
                            120
Gln Glu Cys Gly Lys Lys Leu Ser Cys Ser Ser Ser Leu His Arg His
                        135
                                            140
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Glu Arg Thr His Ser Gly Gly Lys Leu Tyr Glu Cys Gln Lys Cys Asp
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                                        155
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Gln Val Phe Arg Cys Pro Thr Ser Leu His Ala
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<210> 1939
<211> 1233
<212> DNA
<213> Homo sapiens
<400> 1939
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120
tgagggtgcc aagcatcatg ctgttggatg tcctgtacag atgggatgtc agctcctttt
180
tecageagat ecaaagaagt ageettagta ataaceetet tttecagtat aagtatttgg
ctcttaatat gcattatgta ggttatatct taagtgtggt gctgctaaca ttgcccaggc
agcatctggt toagetttat ctatattttt tgactgetet geteetetat getggacate
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tagaacctct ctctatgaat cggtttacca cagccttaat aggtcagttg gtggtgtgta
480
ctttatgete etgtgteatg aaaacaaage agatttgget gtttteaget cacatgette
ctctgctagc acgactctgc cttgttcctt tggagacaat tgctatcatc aataaatttg
600
ctatgatttt tactggattg gaagttetet attttettgg gtetaatett ttggtacett
ataaccttgc taaatctgca tacagagaat tggttcaggt agtggaggta tatggccttc
tegeettggg aatgteeetg tggaatcaae tggtagteee tgttetttte atggttttet
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ggctcgtctt atttgctctt cagatttact cctatttcag tactcgagat cagcctgcat
cacgtgagag gcttcttttc ctttttctga caaggtaatt aataagagcc tatgatacta
tatataacct tagaaagaga aaactttgat ctaggaatag taagttttgc agattacttt
tatcgttcat gttacacaac ttcgtatttt gttaagatag gattttcatt cactggatac
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ggaccagagt gtagcaaatg atttgtggaa aggtacatag cacatcgtaa aagtattttt
1140
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tattgagtat tttaaatgta ccataccatt naa
1233
<210> 1940
<211> 266
<212> PRT
<213> Homo sapiens
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                                                  30
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           20
Ser Phe Phe Gln Gln Ile Gln Arg Ser Ser Leu Ser Asn Asn Pro Leu
                          40
Phe Gln Tyr Lys Tyr Leu Ala Leu Asn Met His Tyr Val Gly Tyr Ile
                       55
                                          60
Leu Ser Val Val Leu Leu Thr Leu Pro Arg Gln His Leu Val Gln Leu
                  70
Tyr Leu Tyr Phe Leu Thr Ala Leu Leu Leu Tyr Ala Gly His Gln Ile
                                 90
Ser Arg Asp Tyr Val Arg Ser Glu Leu Gly Phe Ala Tyr Glu Gly Pro
                              105
                                                 110
           100
Met Tyr Leu Glu Pro Leu Ser Met Asn Arg Phe Thr Thr Ala Leu Ile
                                              125
       115
                       120
Gly Gln Leu Val Val Cys Thr Leu Cys Ser Cys Val Met Lys Thr Lys
                                          140
                       135
    130
Gln Ile Trp Leu Phe Ser Ala His Met Leu Pro Leu Leu Ala Arg Leu
                                      155
                  150
Cys Leu Val Pro Leu Glu Thr Ile Ala Ile Ile Asn Lys Phe Ala Met
                                   170
               165
Ile Phe Thr Gly Leu Glu Val Leu Tyr Phe Leu Gly Ser Asn Leu Leu
                                                  190
                               185
           180
Val Pro Tyr Asn Leu Ala Lys Ser Ala Tyr Arg Glu Leu Val Gln Val
                                              205
                           200
        195
Val Glu Val Tyr Gly Leu Leu Ala Leu Gly Met Ser Leu Trp Asn Gln
                                         220
                     215
Leu Val Val Pro Val Leu Phe Met Val Phe Trp Leu Val Leu Phe Ala
                               235
                   230
Leu Gln Ile Tyr Ser Tyr Phe Ser Thr Arg Asp Gln Pro Ala Ser Arg
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255
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Glu Arg Leu Leu Phe Leu Phe Leu Thr Arg
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<210> 1941
<211> 411
<212> DNA
<213> Homo sapiens
<400> 1941
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gcacagccta cggtcgggag gatttcaagc cccgtgtggg cagtcacgta ggcaccggct
acaaatcaaa tttccagccc gtggtctcat gccaagccag tctggaggcc ttagacaacc
cggccagggg ggaacaagcc caggaccatt tccagtctgt ggccagccag agctaccgcc
ccctggaggt gcctgacggc aagcatcccc tgccctggag catgcgccag accagctcag
getatgggeg ggagaageee agtgegggte ecceeacaa ggaggteegg a
<210> 1942
<211> 129
<212> PRT
<213> Homo sapiens
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Met Met Gly Lys Leu Pro Leu Gly Val Val Ser Pro Tyr Val Lys Met
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Ser Ser Gly Gly Tyr Thr Asp Pro Leu Lys Phe Tyr Ala Thr Ser Tyr
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                                25
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Cys Thr Ala Tyr Gly Arg Glu Asp Phe Lys Pro Arg Val Gly Ser His
                                                45
                           40
Val Gly Thr Gly Tyr Lys Ser Asn Phe Gln Pro Val Val Ser Cys Gln
                        55
                                            60
    50
Ala Ser Leu Glu Ala Leu Asp Asn Pro Ala Arg Gly Glu Gln Ala Gln
                                        75
                    70
Asp His Phe Gln Ser Val Ala Ser Gln Ser Tyr Arg Pro Leu Glu Val
                                    90
               85
Pro Asp Gly Lys His Pro Leu Pro Trp Ser Met Arg Gln Thr Ser Ser
                               105
                                                    110
            100
Gly Tyr Gly Arg Glu Lys Pro Ser Ala Gly Pro Pro Thr Lys Glu Val
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                                                125
Arg
<210> 1943
<211> 386
<212> DNA
<213> Homo sapiens
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<400> 1943

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nagaaacatt cagggctcca acagggtgga aaacatgagg ctgcaggatg tttaacagga
gtetttgetg cageteetet tggageettt aacgagatae tatcatgeet atgaactgee
acacagatgt acatggcata gcactgccca aaagtatcag cccaaggaac cctactttcc
ccagcaacat ctaactcaga aatgctgatc tttggcctca atctggtccc aaaatacctc
cagggtattt tgggcttcgg tgtgttcaca cacttggtca tgtaaatctg aacacagact
300
ctctctgcct tggcaagaac ccccacacc cccatagata attacaccct ttggttctcc
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386
<210> 1944
<211> 111
<212> PRT
<213> Homo sapiens
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Met Gly Val Trp Gly Val Leu Ala Lys Ala Glu Arg Val Cys Val Gln
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Ile Tyr Met Thr Lys Cys Val Asn Thr Pro Lys Pro Lys Ile Pro Trp
            20
                                25
                                                    30
Arg Tyr Phe Gly Thr Arg Leu Arg Pro Lys Ile Ser Ile Ser Glu Leu
        35
                            40
                                                45
Asp Val Ala Gly Glu Ser Arg Val Pro Trp Ala Asp Thr Phe Gly Gln
   50
                        55
                                            60
Cys Tyr Ala Met Tyr Ile Cys Val Ala Val His Arg His Asp Ser Ile
                                        75
Ser Leu Lys Ala Pro Arg Gly Ala Ala Ala Lys Thr Pro Val Lys His
               85
                                   90
Pro Ala Ala Ser Cys Phe Pro Pro Cys Trp Ser Pro Glu Cys Phe
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                                105
<210> 1945
<211> 443
<212> DNA
<213> Homo sapiens
<400> 1945
naegegteae gaagegeget eggeeeaegt ggeteeaagg gegteeaege geeecteete
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ctcgcgatcc agcgantcgg catgctacag gagaaaaaag ccgcactgca taaaaaagtg
cgactggaaa ttgcggacnn tcgtagacgc caaaagcttg aatctgcgcg cgtcaaaacc
gaatcgctga tcatggacga tatacatttg gagttgcttg aactgcttga gctctactgt
300
```

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gagacactct atgccagatt cggattacta gaaggacgcg acaatgagcc tgatgatgcg
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catgtgctcc aaaacatgct gaa
443
<210> 1946
<211> 147
<212> PRT
<213> Homo sapiens
<400> 1946
Xaa Ala Ser Arg Ser Ala Leu Gly Pro Arg Gly Ser Lys Gly Val His
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Ala Pro Leu Leu Asp Arg Leu Val Ser Asn Met Ala Arg Trp His Ala
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Thr Arg Thr Lys Ile Gln Leu Lys Leu Ala Ile Gln Arg Xaa Gly Met
                            40
Leu Gln Glu Lys Lys Ala Ala Leu His Lys Lys Val Arg Leu Glu Ile
                                            60
                        55
Ala Asp Xaa Arg Arg Arg Gln Lys Leu Glu Ser Ala Arg Val Lys Thr
                                        75
                    70
Glu Ser Leu Ile Met Asp Asp Ile His Leu Glu Leu Leu Glu Leu Leu
                                    90
                85
Glu Leu Tyr Cys Glu Thr Leu Tyr Ala Arg Phe Gly Leu Leu Glu Gly
                                105
            100
Arg Asp Asn Glu Pro Asp Asp Ala Ile Arg Glu Pro Met Ile Ala Ile
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        115
                            120
Ile His Ala Ala His Arg Thr Glu Val Lys Glu Leu His Val Leu Gln
                        135
   130
Asn Met Leu
145
<210> 1947
<211> 472
<212> DNA
<213> Homo sapiens
<400> 1947
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gactgtgccg caggtgcagg agggtcagat ggaaacaaaa ggcgcaggcg gcctccacaa
gegeeeegtg gggcaeggat gtgcgcaggg eegagetgea getetgggee atgaggetet
gcagcaggtg caggtcactg agctcccagg cccagcagag gcgcgtcagg gtgcaggcgg
cotgoatgoo cagococtgt googocaget toagoagogt gooaggoaga gactootogg
ccatgaggaa ctcctgcagg gacacggtgg ggttggccga ggccccgtcc aaggtgaccc
cgtgcgccag gaagagcagg aagagcaggg tgagcagcag gtcaggccca aagtccccag
420
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cccagggccc gagctcgaac agcgtcctca tctccaggaa gcaggccccg ag
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<211> 150
<212> PRT
<213> Homo sapiens
<400> 1948
Met Arg Thr Leu Phe Glu Leu Gly Pro Trp Ala Gly Asp Phe Gly Pro
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Asp Leu Leu Thr Leu Leu Phe Leu Leu Phe Leu Ala His Gly Val
                                25
            20
Thr Leu Asp Gly Ala Ser Ala Asn Pro Thr Val Ser Leu Gln Glu Phe
                            40
       35
Leu Met Ala Glu Glu Ser Leu Pro Gly Thr Leu Leu Lys Leu Ala Ala
                                            60
                        55
Gln Gly Leu Gly Met Gln Ala Ala Cys Thr Leu Thr Arg Leu Cys Trp
Ala Trp Glu Leu Ser Asp Leu His Leu Leu Gln Ser Leu Met Ala Gln
                                   90
                85
Ser Cys Ser Ser Ala Leu Arg Thr Ser Val Pro His Gly Ala Leu Val
                                                    110
                                105
            100
Glu Ala Ala Cys Ala Phe Cys Phe His Leu Thr Leu Leu His Leu Arg
                            120
       115
His Ser Pro Pro Ala Tyr Ser Gly Pro Ala Val Ala Leu Leu Val Thr
    130
                                            140
Val Thr Ala Tyr Thr Ala
                    150
145
<210> 1949
<211> 395
<212> DNA
<213> Homo sapiens
<400> 1949
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120
coggatgeet egacgggacg etcacaaget tecattggee attegegggt egettggtet
180
cgaccgcgcg tacaaccggg tctacatggt cgccatgcca ccgatcgggc aatggcattc
240
cacagtacgc geageggeeg tegtatttge geeggageeg ategegetgt getttegtea
gccggctcac gctttatgct ccacggcagg tgtggcagca tcctggcagg cgactccaag
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395
<210> 1950
<211> 125
<212> PRT
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<213> Homo sapiens <400> 1950 Met Leu His Glu Arg Leu Ala Pro Leu Leu Lys Arg His Leu Pro Leu 10 Ala Asp Val Ala Arg Arg Thr Gly Arg His Val Ile Arg Leu Asp Val 25 20 Thr Leu Arg Met Pro Arg Arg Asp Ala His Lys Leu Pro Leu Ala Ile 40 4.5 Arg Gly Ser Leu Gly Leu Asp Arg Ala Tyr Asn Arg Val Tyr Met Val 55 60 Ala Met Pro Pro Ile Gly Gln Trp His Ser Thr Val Arg Ala Ala Ala 75 70 Val Val Phe Ala Pro Glu Pro Ile Ala Leu Cys Phe Arg Gln Pro Ala 90 85 His Ala Leu Cys Ser Thr Ala Gly Val Ala Ala Ser Trp Gln Ala Thr 105 Pro Arg Ser Ala Pro Ala Ser Ser Leu Thr Ala Pro Gly 120 <210> 1951 <211> 363 <212> DNA <213> Homo sapiens <400> 1951 eggeegeege eteteegete eegggeeeee geegeeaeeg egeeeeeege gggagatgga acageggaac eggeteggtg ceeteggata cetgeegeet etgetgetge atgecetget 120 gctcttcgtg gccgacgctg cattcacaga agtccccaaa gatgtgacag tacgggaggg agacgacato gaaatgeeet gegegtteeg ggeeagegga geeacetegt attegetgga 240 gattcagtgg tggtacctca aggagccacc ccgggagctg ctgcacgagc tggcgctcag cgtgccgggc gcccggagca aggtaacaaa taaggatgca actaaaatca gcaccgtacg 360 cat 363 <210> 1952 <211> 110 <212> PRT <213> Homo sapiens <400> 1952 Arg Pro Pro Pro Leu Arg Ser Arg Ala Pro Ala Ala Thr Ala Pro Pro 10 Ala Gly Asp Gly Thr Ala Glu Pro Ala Arg Cys Pro Arg Ile Pro Ala 20 25 Ala Ser Ala Ala Ala Cys Pro Ala Ala Leu Arg Gly Arg Arg Cys Ile 40 His Arg Ser Pro Gln Arg Cys Asp Ser Thr Gly Gly Arg Arg His Arg

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60
                       55
Asn Ala Leu Arg Val Pro Gly Gln Arg Ser His Leu Val Phe Ala Gly
                  70
Asp Ser Val Val Val Pro Gln Gly Ala Thr Pro Gly Ala Ala Arg
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              85
Ala Gly Ala Gln Arg Ala Gly Arg Pro Glu Gln Gly Asn Lys
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<210> 1953
<211> 329
<212> DNA
<213> Homo sapiens
<400> 1953
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catgtgggca gccactgcat tegectgeet eccaagggee ggccaeggge gagtateage
categoacet ttgccagect ggacetgtge egeateaget aeggegetee ggtaegggte
acateggtgg egetggagac catetateac etgeagatee tgttgagegg geattgeege
tccagctccc gtggtgagga tgacgtggn
329
<210> 1954
<211> 109
<212> PRT
<213> Homo sapiens
<400> 1954
Thr Arg Gln Pro Glu Pro Asn Asn Tyr Lys Arg Val Ala Thr Met Thr
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        5
Val Leu Leu Ser Glu Arg Ser Gln Ile Phe Arg Gly Ala Asp Ala Tyr
                                25
Ala Val Ser Asp Tyr Val Asn Gln His Val Gly Ser His Cys Ile Arg
                                               45
                           40
Leu Pro Pro Lys Gly Arg Pro Arg Ala Ser Ile Ser His Arg Thr Phe
                       55
Ala Ser Leu Asp Leu Cys Arg Ile Ser Tyr Gly Ala Pro Val Arg Val
                                       75
                    70
 Thr Ser Val Ala Leu Glu Thr Ile Tyr His Leu Gln Ile Leu Leu Ser
                                    90
               85
 Gly His Cys Arg Ser Ser Ser Arg Gly Glu Asp Asp Val
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            100
 <210> 1955
 <211> 415
 <212> DNA
 <213> Homo sapiens
 <400> 1955
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120
ggaaagggcc acacaagccc gatagtgacc atcaacggat cattgtaggc tatttcaaaa
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aatggaaaac atggatactc ccagtccaca acggcaccgt gtccgagttt ttcacccaac
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<210> 1956
<211> 127
<212> PRT
<213> Homo sapiens
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Met Pro Asp Lys Val Leu Ser His Met Val Glu Tyr Cys Trp Gly Arg
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Phe Thr Asp Asn Ile Lys Tyr Ala Val Ala Ala Gln Tyr Trp Lys Gly
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                                25
Pro His Lys Pro Asp Ser Asp His Gln Arg Ile Ile Val Gly Tyr Phe
                                                45
                            40
       35
Lys Thr Ala Lys Gln Ala Met Asn Ala Ala Lys Gln Phe His Trp Asn
                                            60
                        55
Thr Arg Leu Gln Gln Gln Trp Lys Thr Trp Ile Leu Pro Val His Asn
                                        75
65
                    70
Gly Thr Val Ser Glu Phe Phe Thr Gln Gln Lys Thr Leu Leu Asp Glu
                85
                                    90
                                                        95
Gln Asp Asp Ser Asn Ser Glu Leu Pro Glu His Leu Gln Asn Val Met
                                105
           100
Cys Gly Lys Thr Leu His His Gln Asp Asp Thr Ile Ser Trp Cys
                                                125
       115
                            120
<210> 1957
<211> 526
<212> DNA
<213> Homo sapiens
<400> 1957
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caggagetee teeetgtgag gacaaagtte cagagteggg gteaegggee ttaettattg
gggaggaggc ccgccggggc cgcagtgggc gaggggccct tggcgcgctc ctgggaggtc
agacctggca cagtgtggcg aaggtttcca gtgcgatccc gagtcgaggg cgcatttcgc
ggtgactgcc agcatgaacc gcagccgacc gagttctgcg atcgggcttc tccgcagagt
300
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ggggaccetg gggaaggege caacttetet cetetgeeca ceteaeteec egegggegte
cctgggccgc ctgcccgggc cgcactgggc ggcctccate gtcccttccc tctacctgca
ctgccccagg cgggagagag gccttggccc nncgagggac cagctgcagc gggcagcggg
gtectgetee eccaacecee gececatgge acggggetga aceggt
526
<210> 1958
<211> 175
<212> PRT
<213> Homo sapiens
<400> 1958
Thr Arg Ser Gly Glu Ile Phe Leu Thr Ser Leu Arg Ala Ala Glu Pro
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1
Ile Gly Asp His Gln Glu Leu Leu Pro Val Arg Thr Lys Phe Gln Ser
                                25
            20
Arg Gly His Gly Pro Tyr Leu Leu Gly Arg Arg Pro Ala Gly Ala Ala
Val Gly Glu Gly Pro Leu Ala Arg Ser Trp Glu Val Arg Pro Gly Thr
                        55
Val Trp Arg Arg Phe Pro Val Arg Ser Arg Val Glu Gly Ala Phe Arg
                                        75
                    70
Gly Asp Cys Gln His Glu Pro Gln Pro Thr Glu Phe Cys Asp Arg Ala
                                                        95
                                    90
                85
Ser Pro Gln Ser Gly Asp Pro Gly Glu Gly Ala Asn Phe Ser Pro Leu
                                105
            100
Pro Thr Ser Leu Pro Ala Gly Val Pro Gly Pro Pro Ala Arg Ala Ala
                                                125
                            120
        115
Leu Gly Gly Leu His Arg Pro Phe Pro Leu Pro Ala Leu Pro Gln Ala
                                            140
                        135
Gly Glu Arg Pro Trp Pro Xaa Glu Gly Pro Ala Ala Gly Ser Gly
                                        155
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145
Val Leu Leu Pro Gln Pro Pro Pro His Gly Thr Gly Leu Asn Arg
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                165
<210> 1959
<211> 378
<212> DNA
<213> Homo sapiens
<400> 1959
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cgtcagaagg atcagggcgc ttgtcgtcgt cagacttcag gacateceac gacatggtga
acggctggga ggagaccttg tccccgtcgg tcttggcgcc gacaacaaca ccgctcatgg
tgtattttcc ggcatgagtg aagaaccagt gggcatgctg atgacccttg atcggcagtg
aggeteettt gaccacetga tatgtgteat cagegaggaa ggtgeegagt ttggegttet
300
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cgtctgcctc gggtgaattg ccgaggaggt acatcttgcc tggacccgta atcgcggtga
agtcgacgcg caacgcgt
378
<210> 1960
<211> 111
<212> PRT
<213> Homo sapiens
<400> 1960
Met Tyr Leu Leu Gly Asn Ser Pro Glu Ala Asp Glu Asn Ala Lys Leu
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Gly Thr Phe Leu Ala Asp Asp Thr Tyr Gln Val Val Lys Gly Ala Ser
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Leu Pro Ile Lys Gly His Gln His Ala His Trp Phe Phe Thr His Ala
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Gly Lys Tyr Thr Met Ser Gly Val Val Gly Ala Lys Thr Asp Gly
Asp Lys Val Ser Ser Gln Pro Phe Thr Met Ser Trp Asp Val Leu Lys
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Gln Ser Thr Thr Phe Cys Ser Ser Pro Ser Pro Trp Arg Pro Leu Arg
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His Ala Ser Arg Gly Pro Pro Ser Asp Leu Ser Gly Ser Ser Pro
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Ala Gln Ala Glu Glu Gln Leu Glu Gln Glu Thr Arg Glu Arg Ile Leu
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                                   410
Ser Gly Lys Leu Val Pro Lys Ser Lys Lys Arg Phe Lys Glu Val Val
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                               425
                                                   430
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Leu Ala Asp Arg Thr Ala Leu Asp Arg Ala Leu Arg Ser Tyr His Arg
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                                         60
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Asn Ala Glu Ser His Cys Gly Ser Leu Met Glu Arg Asp Ile Thr Asn
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Cys Ser Ser Pro Glu Ile Ser Ala Glu Leu Ile Gly Gln Phe Ser Thr
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Lys Lys Asn Lys Gln Glu Leu Thr Gln Asp Lys Gly Ala Ser Leu Glu
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ALA	GIII	Ser		261	Gin	AIG	rsp	345	014			E	350		
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Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466	Thr Ser Ala Pro Leu Pro Ala Pro 1430 Thr Gly 1445 Pro Ala	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly Gln Gly 145 Leu Val 1465	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe O Pro Thr	Leu Pr 1405 Thr Le 0 Pro Se Pro Th	o Ala 90 o Ala u Ala r Gln 145! a Gln 70	Pro Pro Leu Thr 1440 Thr 5
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466	Thr Ser Ala Pro Leu Pro Ala Pro 1430 Thr Gly 1445 Pro Ala	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly Gln Gly 145 Leu Val 1465	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe O Pro Thr	Leu Pr 1405 Thr Le 0 Pro Se Pro Th	o Ala 90 o Ala u Ala r Gln 145! a Gln 70	Pro Pro Leu Thr 1440 Thr 5
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466 Leu Ser Leu Ala 1475	Thr Ser Ala Pro Leu Pro Ala Pro 1430 Thr Gly 1445 Pro Ala Pro Gly	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro Ser Ser Pro Pro 148	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly Gln Gly 145 Leu Val 1465 Leu Gly 0	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe Pro Thr	Leu Pr 1405 Thr Le 0 Pro Se Pro Th Pro Al Gln Th	o Ala 90 o Ala u Ala r Gln r Gln 145: a Gln 70 r Leu	Pro Pro Leu Thr 1440 Thr 5 Thr
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466 Leu Ser Leu Ala 1475	Thr Ser Ala Pro Leu Pro Ala Pro 1430 Thr Gly 1445 Pro Ala Pro Gly	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro Ser Ser Pro Pro 148	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly Gln Gly 145 Leu Val 1465 Leu Gly 0	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe Pro Thr	Leu Pr 1405 Thr Le 0 Pro Se Pro Th Pro Al Gln Th	o Ala 90 o Ala u Ala r Gln r Gln 145: a Gln 70 r Leu	Pro Pro Leu Thr 1440 Thr 5 Thr
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466 Leu Ser Leu Ala 1475 Leu Ala Pro Ala 1490	Thr Ser Ala Pro Leu Pro 1430 Thr Gly 1445 Pro Ala Pro Gly Pro Pro	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro Ser Ser Pro Pro 148 Leu Ala 1495	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly Gln Gly 145 Leu Val 1465 Leu Gly 0 Pro Ala	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe Pro Thr Pro Thr Ser Pro 150	Leu Pr 1405 Thr Le 0 Pro Se Pro Th Pro Al 14 Gln Th 1485 Val Gl	o Ala 90 o Ala u Ala r Gln 145: a Gln 70 r Leu y Pro	Pro Pro Leu Thr 1440 Thr 5 Thr Ser Ala
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466 Leu Ser Leu Ala 1475 Leu Ala Pro Ala 1490	Thr Ser Ala Pro Leu Pro 1430 Thr Gly 1445 Pro Ala Pro Gly Pro Pro	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro Ser Ser Pro Pro 148 Leu Ala 1495	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly Gln Gly 145 Leu Val 1465 Leu Gly 0 Pro Ala	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe Pro Thr Pro Thr Ser Pro 150	Leu Pr 1405 Thr Le 0 Pro Se Pro Th Pro Al 14 Gln Th 1485 Val Gl	o Ala 90 o Ala u Ala r Gln 145: a Gln 70 r Leu y Pro	Pro Pro Leu Thr 1440 Thr 5 Thr Ser Ala
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466 Leu Ser Leu Ala 1475 Leu Ala Pro Ala 1490 Pro Ala His Thr	Thr Ser Ala Pro Leu Pro 1430 Thr Gly 1445 Pro Ala Pro Gly Pro Pro Leu Thr	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro Ser Ser Pro Pro 148 Leu Ala 1495 Leu Ala	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly Gln Gly 145 Leu Val 1465 Leu Gly 0 Pro Ala	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe Pro Thr Pro Thr Ser Pro 150 Ser Ser	Leu Pr 1405 Thr Le 0 Pro Se Pro Th Pro Al Gln Th 1485 Val Gl 0	o Ala 90 o Ala u Ala u Ala r Gln 145: a Gln 70 r Leu y Pro a Ser	Pro Pro Leu Thr 1440 Thr 5 Thr Ser Ala
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466 Leu Ser Leu Ala 1475 Leu Ala Pro Ala 1490 Pro Ala His Thr	Thr Ser Ala Pro Leu Pro Ala Pro 1430 Thr Gly 1445 Pro Ala Pro Gly Pro Pro Leu Thr 1510	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro Ser Ser Pro Pro 148 Leu Ala 1495 Leu Ala	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly Gln Gly 145 Leu Val 1465 Leu Gly 0 Pro Ala Pro Ala	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe Pro Thr Pro Thr Ser Pro 150 Ser Ser 1515	Leu Pr 1405 Thr Le 0 Pro Se Pro Th Pro Al Gln Th 1485 Val Gl Ser Al	o Ala 90 o Ala u Ala u Ala r Gln 145: a Gln 70 r Leu y Pro a Ser	Pro Pro Leu Thr 1440 Thr 5 Thr Ser Ala Leu 1520
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466 Leu Ser Leu Ala 1475 Leu Ala Pro Ala 1490 Pro Ala His Thr	Thr Ser Ala Pro Leu Pro Ala Pro 1430 Thr Gly 1445 Pro Ala Pro Gly Pro Pro Leu Thr 1510 Ser Val	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro Ser Ser Pro Pro 148 Leu Ala 1495 Leu Ala	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly Gln Gly 145 Leu Val 1465 Leu Gly 0 Pro Ala Pro Ala Leu Thr	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe O Pro Thr Pro Thr Ser Pro 150 Ser Ser 1515 Leu Ser	Leu Pr 1405 Thr Le 0 Pro Se Pro Th Pro Al Gln Th 1485 Val Gl Ser Al	o Ala 90 o Ala u Ala u Ala r Gln 145: a Gln 70 r Leu y Pro a Ser a Pro	Pro Pro Leu Thr 1440 Thr 5 Thr Ser Ala Leu 1520 Val
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466 Leu Ser Leu Ala 1475 Leu Ala Pro Ala 1490 Pro Ala His Thr 1505 Leu Ala Pro Ala	Thr Ser Ala Pro Leu Pro 1430 Thr Gly 1445 Pro Ala Pro Gly Pro Pro Leu Thr 1510 Ser Val	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro Ser Ser Pro Pro 148 Leu Ala 1495 Leu Ala Gln Thr	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly Gln Gly 145 Leu Val 1465 Leu Gly 0 Pro Ala Pro Ala Leu Thr	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe O Pro Thr Pro Thr Ser Pro 150 Ser Ser 1515 Leu Ser	Leu Pr 1405 Thr Le 0 Pro Se Pro Th Pro Al Gln Th 1485 Val Gl Ser Al	o Ala 90 o Ala u Ala u Ala r Gln 145: a Gln 70 r Leu y Pro a Ser a Pro 153:	Pro Pro Leu Thr 1440 Thr 5 Thr Ser Ala Leu 1520 Val
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 146 Leu Ser Leu Ala 1475 Leu Ala Pro Ala 1490 Pro Ala His Thr 1505 Leu Ala Pro Ala Pro Thr Leu Gly	Thr Ser Ala Pro Leu Pro Ala Pro 1430 Thr Gly 1445 Pro Ala Pro Gly Pro Pro Leu Thr 1510 Ser Val 1525 Pro Ala	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro Ser Ser Pro Pro 148 Leu Ala 1495 Leu Ala Gln Thr	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly Gln Gly 145 Leu Val 1465 Leu Gly 0 Pro Ala Pro Ala Leu Thr 153 Gln Thr	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe O Pro Thr Pro Thr Ser Pro 150 Ser Ser 1515 Leu Ser	Leu Pr 1405 Thr Le 0 Pro Se Pro Th Pro Al Gln Th 1485 Val Gl 0 Ser Al Pro Al	o Ala 90 o Ala u Ala u Ala r Gln 145: a Gln 70 r Leu y Pro a Ser a Pro 153: a Pro	Pro Pro Leu Thr 1440 Thr 5 Thr Ser Ala Leu 1520 Val
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466 Leu Ser Leu Ala 1475 Leu Ala Pro Ala 1490 Pro Ala His Thr 1505 Leu Ala Pro Ala Pro Thr Leu Gly	Thr Ser Ala Pro Leu Pro Ala Pro 1430 Thr Gly 1445 Pro Ala Pro Pro Leu Thr 1510 Ser Val 1525 Pro Ala	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro Ser Ser Pro Pro 148 Leu Ala 1495 Leu Ala Gln Thr	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly Gln Gly 145 Leu Val 1465 Leu Gly 0 Pro Ala Pro Ala Leu Thr 153 Gln Thr	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe O Pro Thr Pro Thr Ser Pro 150 Ser Ser 1515 Leu Ser O Leu Ala	Leu Pr 1405 Thr Le 0 Pro Se Pro Th Pro Al Gln Th 1485 Val Gl 0 Ser Al Pro Al	o Ala 90 o Ala u Ala u Ala r Gln 145: a Gln 70 r Leu y Pro a Ser a Pro 153: a Pro 50	Pro Pro Leu Thr 1440 Thr Thr Ser Ala Leu 1520 Val Ala
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466 Leu Ser Leu Ala 1475 Leu Ala Pro Ala 1490 Pro Ala His Thr 1505 Leu Ala Pro Ala Pro Thr Leu Gly 1546 Ser Thr Gln Ser	Thr Ser Ala Pro Leu Pro Ala Pro 1430 Thr Gly 1445 Pro Ala Pro Pro Leu Thr 1510 Ser Val 1525 Pro Ala	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro Ser Ser Pro Pro 148 Leu Ala 1495 Leu Ala Gln Thr Ala Ala Ser Gln	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly Gln Gly 145 Leu Val 1465 Leu Gly 0 Pro Ala Pro Ala Leu Thr 153 Gln Thr 1545 Ala Ser	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe O Pro Thr Pro Thr Ser Pro 150 Ser Ser 1515 Leu Ser O Leu Ala	Leu Pr 1405 Thr Le 0 Pro Se Pro Th Pro Al Gln Th 1485 Val Gl 0 Ser Al Pro Al Leu Al Val Val	o Ala 90 o Ala u Ala u Ala r Gln 145: a Gln 70 r Leu y Pro a Ser a Pro 153: a Pro 50	Pro Pro Leu Thr 1440 Thr Thr Ser Ala Leu 1520 Val Ala
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466 Leu Ser Leu Ala 1475 Leu Ala Pro Ala 1490 Pro Ala His Thr 1505 Leu Ala Pro Ala Pro Thr Leu Gly 1546 Ser Thr Gln Ser	Thr Ser Ala Pro Leu Pro Ala Pro 1430 Thr Gly 1445 Pro Ala Pro Pro Leu Thr 1510 Ser Val 1525 Pro Ala Pro Ala	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro Pro 148 Leu Ala Leu Ala Gln Thr Ala Ala Ser Gln 156	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly 145 Leu Val 1465 Leu Gly 0 Pro Ala Pro Ala Leu Thr 153 Gln Thr 1545 Ala Ser	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe O Pro Thr Pro Thr Ser Pro 150 Ser Ser 1515 Leu Ser U Leu Ala Ser Leu	Leu Pr 1405 Thr Le 0 Pro Se Pro Th Pro Al Gln Th 1485 Val Gl O Ser Al Pro Al Leu Al 15 Val Val 1565	o Ala 90 o Ala u Ala u Ala r Gln 145: a Gln 70 r Leu y Pro a Ser a Pro 153: a Pro 50 l Ser	Pro Pro Leu Thr 1440 Thr Thr Ser Ala Leu 1520 Val Ala Ala
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466 Leu Ser Leu Ala 1475 Leu Ala Pro Ala 1490 Pro Ala His Thr 1505 Leu Ala Pro Ala Pro Thr Leu Gly 1546 Ser Thr Gln Ser 1555 Ser Gly Ala Ala	Thr Ser Ala Pro Leu Pro Ala Pro 1430 Thr Gly 1445 Pro Ala Pro Pro Leu Thr 1510 Ser Val 1525 Pro Ala Pro Ala	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro Ser Ser Pro Pro 148 Leu Ala 1495 Leu Ala Gln Thr Ala Ala Ser Gln 156 Pro Val	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly 145 Leu Val 1465 Leu Gly 0 Pro Ala Pro Ala Leu Thr 153 Gln Thr 1545 Ala Ser	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe O Pro Thr Pro Thr Ser Pro 150 Ser Ser 1515 Leu Ser C Leu Ala Ser Leu Val Ser	Leu Pr 1405 Thr Le 0 Pro Se Pro Th Pro Al Gln Th 1485 Val Gl O Ser Al Pro Al Leu Al 1505 Val Val 1565 Arg Le	o Ala 90 o Ala u Ala u Ala r Gln 145: a Gln 70 r Leu y Pro a Ser a Pro 153: a Pro 50 l Ser	Pro Pro Leu Thr 1440 Thr Thr Ser Ala Leu 1520 Val Ala Ala
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466 Leu Ser Leu Ala 1475 Leu Ala Pro Ala 1490 Pro Ala His Thr 1505 Leu Ala Pro Ala Pro Thr Leu Gly 1546 Ser Thr Gln Ser 1555 Ser Gly Ala Ala 1570	Thr Ser Ala Pro Leu Pro Ala Pro 1430 Thr Gly 1445 Pro Ala Pro Pro Leu Thr 1510 Ser Val 1525 Pro Ala Pro Ala Pro Ala Pro Leu	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro Pro Pro Pro 148 Leu Ala 1495 Leu Ala Gln Thr Ala Ala Ser Gln 156 Pro Val	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly Gln Gly 145 Leu Val 1465 Leu Gly 0 Pro Ala Pro Ala Leu Thr 153 Gln Thr 1545 Ala Ser 0 Thr Met	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe O Pro Thr Pro Thr Ser Pro 150 Ser Ser 1515 Leu Ser C Leu Ala Ser Leu Val Ser	Leu Pr 1405 Thr Le 0 Pro Se Pro Th 1485 Val Gl 0 Ser Al Pro Al Leu Al 1565 Arg Le 0	o Ala 90 o Ala u Ala u Ala r Gln 145: a Gln 70 r Leu y Pro a Ser a Pro 153: a Pro 50 l Ser u Pro	Pro Pro Leu Thr 1440 Thr Thr Ser Ala Leu 1520 Val Ala Ala Val
Thr Pro Val Leu 1395 Val Pro Ser Pro 1410 Ala Pro Ala Leu 1425 Leu Ser Leu Gly Leu Ser Leu Thr 1466 Leu Ser Leu Ala 1475 Leu Ala Pro Ala 1490 Pro Ala His Thr 1505 Leu Ala Pro Ala Pro Thr Leu Gly 1546 Ser Thr Gln Ser 1555 Ser Gly Ala Ala	Thr Ser Ala Pro Leu Pro Ala Pro 1430 Thr Gly 1445 Pro Ala Pro Pro Leu Thr 1510 Ser Val 1525 Pro Ala Pro Ala Pro Ala Pro Leu	Ser Ser 140 Ser Pro 1415 Thr Leu Asn Pro Pro Pro Pro 148 Leu Ala 1495 Leu Ala Gln Thr Ala Ala Ser Gln 156 Pro Val	Ser Ala 1385 Thr Gln 0 Ala Ser Gly Gly Gln Gly 145 Leu Val 1465 Leu Gly 0 Pro Ala Pro Ala Leu Thr 153 Gln Thr 1545 Ala Ser 0 Thr Met	Thr Met Thr Gln 142 Ser Ser 1435 Pro Phe O Pro Thr Pro Thr Ser Pro 150 Ser Ser 1515 Leu Ser C Leu Ala Ser Leu Val Ser	Leu Pr 1405 Thr Le 0 Pro Se Pro Th 1485 Val Gl 0 Ser Al Pro Al Leu Al 1565 Arg Le 0	o Ala 90 o Ala u Ala u Ala r Gln 145: a Gln 70 r Leu y Pro a Ser a Pro 153: a Pro 50 l Ser u Pro	Pro Pro Leu Thr 1440 Thr Thr Ser Ala Leu 1520 Val Ala Ala Val

1585	1590	^		1595			1600
Pro Pro Ser Thr			Glv Glv		Pro A	Ara Ara	
PIO PIO SEI IME	1605	Der Inc	1610			161	
Pro Pro Pro Pro		Ser Dro			Ser I		-
162		Der 110	1625	Dea .mp		1630	•
Lys Arg Lys Arg		Sor Glu		Glu Ara			Leu
	GIII ALG	164		GIU AIG	1645	02	
1635 Ser Glu Ala His	Cl. 112			Tur Gly		ilu Val	Len
	GIY AIA	1655	FIO VAI	166		JIU 701	
1650 Asp Phe Cys Thr	Lou Dro	Cla Pro	בות ופע			alv Pro	Ara
	1670		var Ara	1675	110	31, 110	1680
1665 Ser Pro Gly Pro			Dhe Tro		Thr C	ilu Ala	
Set Plo Gly Plo	1685	PIO IIII	169		••••	169	
His Arg Ala Val		Dro Gla			Gĺn I		
170		FIO GIII	1705	nea mop		1710	
Ile Ile Glu Arg		Pho Val		Pro Val			Pro
1715	PHE TIE	172		210 141	1725		
Pro Ser Leu His	Ala Cve			Tro Len		Pro Arg	Gln
1730	Ala Cys	1735	110 110	174			0
Ala Ala Phe Gln	Glu Gla		Ser Glu			Ara Ala	Ara
1745	1750		SCI GIU	1755	110.		1760
Pro Leu His Arg			Met Ara		Phe F	Pro Asp	
Pro bed his Arg	1765	Cys Asii	177		1110	177	
Arg Leu Ile Gln		Cvs Glv			Leu A		
178		0,5 01,	1785			1790	-
Leu Arg Gln Leu		Glu Glv		Val Leu			Gln
1795	2,5 1114	180			1805		
Met Thr Arg Met	Leu Asp	Val Leu	Glu Gln	Phe Leu	Thr I	Tyr His	GIY
Met Thr Arg Met 1810	Leu Asp	Val Leu 1815	Glu Gln	Phe Leu 182		Tyr His	GIY
1810		1815		182	0		
		1815 Asp Gly		182	0		
1810 His Leu Tyr Leu 1825	Arg Leu 1830	1815 Asp Gly O	Ser Thr	182 Arg Val 1835	0 Glu 0	Gln Arg	Gln 1840
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu	Arg Leu 1830 Arg Phe 1845	1815 Asp Gly O Asn Ala	Ser Thr Asp Lys	182 Arg Val 1835 Arg Ile	O Glu O Phe O	Gln Arg Cys Phe 1859	Gln 1840 Ile
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu	Arg Leu 1830 Arg Phe 1845	1815 Asp Gly O Asn Ala	Ser Thr Asp Lys	182 Arg Val 1835 Arg Ile	O Glu O Phe O	Gln Arg Cys Phe 1859	Gln 1840 Ile
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186	Arg Leu 1830 Arg Phe 1845 Ser Gly	1815 Asp Gly O Asn Ala Gly Val	Ser Thr Asp Lys 1850 Gly Val 1865	182 Arg Val 1835 Arg Ile O Asn Leu	O Glu O Phe O Thr O	Gln Arg Cys Phe 1859 Gly Ala 1870	Gln 1840 Ile 5 Asp
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg	Arg Leu 1830 Arg Phe 1845 Ser Gly	1815 Asp Gly O Asn Ala Gly Val	Ser Thr Asp Lys 1850 Gly Val 1865	182 Arg Val 1835 Arg Ile O Asn Leu	O Glu O Phe O Thr O	Gln Arg Cys Phe 1859 Gly Ala 1870	Gln 1840 Ile 5 Asp
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe	Arg Leu 1836 Arg Phe 1845 Ser Gly O Tyr Asp	1815 Asp Gly 0 Asn Ala Gly Val Ser Asp 188	Ser Thr Asp Lys 1850 Gly Val 1865 Trp Asn	Arg Val 1835 Arg Ile O Asn Leu	O Glu C Phe C Thr C Met F 1885	Gln Arg Cys Phe 1859 Gly Ala 1870 Asp Ala	Gln 1840 Ile 5 Asp Gln
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe	Arg Leu 1836 Arg Phe 1845 Ser Gly O Tyr Asp	1815 Asp Gly 0 Asn Ala Gly Val Ser Asp 188	Ser Thr Asp Lys 1850 Gly Val 1865 Trp Asn	Arg Val 1835 Arg Ile O Asn Leu	O Glu C Phe C Thr C Met F 1885	Gln Arg Cys Phe 1859 Gly Ala 1870 Asp Ala	Gln 1840 Ile 5 Asp Gln
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe 1875 Ala Gln Asp Arg 1890	Arg Leu 1836 Arg Phe 1845 Ser Gly O Tyr Asp	Asp Gly Asn Ala Gly Val Ser Asp 188 Arg Ile 1895	Ser Thr Asp Lys 1850 Gly Val 1865 Trp Asn 0 Gly Gln	Arg Val 1835 Arg Ile 0 Asn Leu Pro Thr Thr Arg 190	O Glu C Phe C Thr C Met A 1885 Asp V	Gln Arg Cys Phe 1859 Gly Ala 1870 Asp Ala Val His	Gln 1840 Ile 5 Asp Gln
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe 1875 Ala Gln Asp Arg	Arg Leu 1836 Arg Phe 1845 Ser Gly O Tyr Asp	Asp Gly Asn Ala Gly Val Ser Asp 188 Arg Ile 1895	Ser Thr Asp Lys 1850 Gly Val 1865 Trp Asn 0 Gly Gln	Arg Val 1835 Arg Ile 0 Asn Leu Pro Thr Thr Arg 190	O Glu C Phe C Thr C Met A 1885 Asp V	Gln Arg Cys Phe 1859 Gly Ala 1870 Asp Ala Val His	Gln 1840 Ile 5 Asp Gln Ile
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe 1875 Ala Gln Asp Arg 1890 Tyr Arg Leu Ile 1905	Arg Leu 1836 Arg Phe 1845 Ser Gly O Tyr Asp Cys His Ser Glu 1916	1815 Asp Gly O Asn Ala Gly Val Ser Asp 188 Arg Ile 1895 Arg Thr	Ser Thr Asp Lys 1850 Gly Val 1865 Trp Asn 0 Gly Gln Val Glu	Arg Val 1835 Arg Ile 0 Asn Leu Pro Thr Thr Arg 190 Glu Asn 1915	O Glu C Phe C I Met A 1885 Asp N O Ile I	Cys Phe 1859 Gly Ala 1870 Asp Ala Val His	Gln 1840 Ile 5 Asp Gln Ile Lys 1920
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe 1875 Ala Gln Asp Arg 1890 Tyr Arg Leu Ile	Arg Leu 1836 Arg Phe 1845 Ser Gly O Tyr Asp Cys His Ser Glu 1916 Arg Met	1815 Asp Gly O Asn Ala Gly Val Ser Asp 188 Arg Ile 1895 Arg Thr	Ser Thr Asp Lys 1850 Gly Val 1865 Trp Asn 0 Gly Gln Val Glu Asp Met	Arg Val 1835 Arg Ile O Asn Leu Pro Thr Thr Arg 190 Glu Asn 1915 Ala Ile	O Glu C Phe C I Met A 1885 Asp N O Ile I	Cys Phe 1859 Gly Ala 1870 Asp Ala Val His Leu Lys	Gln 1840 Ile 5 Asp Gln Ile Lys 1920 Asn
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe 1875 Ala Gln Asp Arg 1890 Tyr Arg Leu Ile 1905 Ala Asn Gln Lys	Arg Leu 1836 Arg Phe 1845 Ser Gly O Tyr Asp Cys His Ser Glu 1916 Arg Met	Asp Gly Asn Ala Gly Val Ser Asp 188 Arg Ile 1895 Arg Thr Leu Gly	Ser Thr Asp Lys 185 Gly Val 1865 Trp Asn O Gly Gln Val Glu Asp Met 1930	Arg Val 1835 Arg Ile O Asn Leu Pro Thr Thr Arg 190 Glu Asn 1915 Ala Ile	O Glu C Phe C I Met A Asp V O Ile I Glu C	Gln Arg Cys Phe 185: Gly Ala 1870 Asp Ala Val His Leu Lys Gly Gly 193:	Gln 1840 Ile 5 Asp Gln Ile Lys 1920 Asn
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe 1875 Ala Gln Asp Arg 1890 Tyr Arg Leu Ile 1905 Ala Asn Gln Lys Phe Thr Thr Ala	Arg Leu 1836 Arg Phe 1845 Ser Gly O Tyr Asp Cys His Ser Glu 1916 Arg Met 1925 Tyr Phe	Asp Gly Asn Ala Gly Val Ser Asp 188 Arg Ile 1895 Arg Thr Leu Gly Lys Gln	Ser Thr Asp Lys 1855 Gly Val 1865 Trp Asn 0 Gly Gln Val Glu Asp Met 1936 Gln Thr	Arg Val 1835 Arg Ile 0 Asn Leu Pro Thr Thr Arg 190 Glu Asn 1915 Ala Ile 0 Ile Arg	O Glu C Glu I	Cys Phe 1859 Gly Ala 1870 Asp Ala Wal His Leu Lys Gly Gly 1939 Leu Phe	Gln 1840 Ile 5 Asp Gln Ile Lys 1920 Asn
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe 1875 Ala Gln Asp Arg 1890 Tyr Arg Leu Ile 1905 Ala Asn Gln Lys Phe Thr Thr Ala	Arg Leu 1836 Arg Phe 1845 Ser Gly 0 Tyr Asp Cys His Ser Glu 1910 Arg Met 1925 Tyr Phe	Asp Gly Asn Ala Gly Val Ser Asp 188 Arg Ile 1895 Arg Thr Leu Gly Lys Gln	Ser Thr Asp Lys 1850 Gly Val 1865 Trp Asn O Gly Gln Val Glu Asp Met 1930 Gln Thr 1945	Arg Val 1835 Arg Ile 0 Asn Leu Pro Thr Thr Arg 190 Glu Asn 1915 Ala Ile 0 Ile Arg	O Glu C Glu I	Gln Arg Cys Phe 1859 Gly Ala 1870 Asp Ala Val His Leu Lys Gly Gly 1939 Leu Phe	Gln 1840 11e 5 Asp Gln 11e Lys 1920 Asn 5
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe 1875 Ala Gln Asp Arg 1890 Tyr Arg Leu Ile 1905 Ala Asn Gln Lys Phe Thr Thr Ala 194 Met Pro Leu Glu	Arg Leu 1836 Arg Phe 1845 Ser Gly 0 Tyr Asp Cys His Ser Glu 1910 Arg Met 1925 Tyr Phe	Asp Gly Asn Ala Gly Val Ser Asp 188 Arg Ile 1895 Arg Thr Leu Gly Lys Gln Ser Ser	Ser Thr Asp Lys 1855 Gly Val 1865 Trp Asn 0 Gly Gln Val Glu Asp Met 1933 Gln Thr 1945 Ser Ser	Arg Val 1835 Arg Ile 0 Asn Leu Pro Thr Thr Arg 190 Glu Asn 1915 Ala Ile 0 Ile Arg	O Glu C Flu C Glu C Glu I Ser F	Gln Arg Cys Phe 1859 Gly Ala 1870 Asp Ala Val His Leu Lys Gly Gly 1939 Leu Phe	Gln 1840 11e 5 Asp Gln 11e Lys 1920 Asn 5
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe 1875 Ala Gln Asp Arg 1890 Tyr Arg Leu Ile 1905 Ala Asn Gln Lys Phe Thr Thr Ala 194 Met Pro Leu Glu	Arg Leu 1836 Arg Phe 1845 Ser Gly O Tyr Asp Cys His Ser Glu 1916 Arg Met 1925 Tyr Phe O Glu Pro	Asp Gly Asn Ala Gly Val Ser Asp 188 Arg Ile 1895 Arg Thr 0 Leu Gly Lys Gln Ser Ser 196	Ser Thr Asp Lys 185 Gly Val 1865 Trp Asn O Gly Gln Val Glu Asp Met 193 Gln Thr 1945 Ser Ser O	Arg Val 1835 Arg Ile 0 Asn Leu Pro Thr Thr Arg 190 Glu Asn 1915 Ala Ile 0 Ile Arg	O Glu C Fle I Glu C Glu I Ser A 1965	Gln Arg Cys Phe 1859 Gly Ala 1870 Asp Ala Wal His Leu Lys Gly Gly 1939 Leu Phe 1950 Ala Pro	Gln 1840 Ile 5 Asp Gln Ile Lys 1920 Asn 5 Asp
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe 1875 Ala Gln Asp Arg 1890 Tyr Arg Leu Ile 1905 Ala Asn Gln Lys Phe Thr Thr Ala 194 Met Pro Leu Glu 1955 Glu Glu Glu Glu	Arg Leu 1836 Arg Phe 1845 Ser Gly O Tyr Asp Cys His Ser Glu 1916 Arg Met 1925 Tyr Phe O Glu Pro	Asp Gly Asn Ala Gly Val Ser Asp 1885 Arg Ile 1895 Leu Gly Lys Gln Ser Ser 196 Ala Ser	Ser Thr Asp Lys 185 Gly Val 1865 Trp Asn O Gly Gln Val Glu Asp Met 193 Gln Thr 1945 Ser Ser O	Arg Val 1835 Arg Ile 0 Asn Leu Pro Thr Thr Arg 190 Glu Asn 1915 Ala Ile 0 Ile Arg Val Pro	O Glu C Fhe C Final C	Gln Arg Cys Phe 1859 Gly Ala 1870 Asp Ala Wal His Leu Lys Gly Gly 1939 Leu Phe 1950 Ala Pro	Gln 1840 Ile 5 Asp Gln Ile Lys 1920 Asn 5 Asp
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe 1875 Ala Gln Asp Arg 1890 Tyr Arg Leu Ile 1905 Ala Asn Gln Lys Phe Thr Thr Ala 194 Met Pro Leu Glu 1955 Glu Glu Glu Glu 1970	Arg Leu 1836 Arg Phe 1845 Ser Gly O Tyr Asp Cys His Ser Glu 1916 Arg Met 1925 Tyr Phe O Glu Pro	Asp Gly Asn Ala Gly Val Ser Asp 188 Arg Ile 1895 Arg Thr Leu Gly Lys Gln Ser Ser 196 Ala Ser 1975	Ser Thr Asp Lys 185 Gly Val 1865 Trp Asn O Gly Gln Val Glu Asp Met 193 Gln Thr 1945 Ser Ser O Lys Gln	Arg Val 1835 Arg Ile 0 Asn Leu Pro Thr Thr Arg 190 Glu Asn 1915 Ala Ile 0 Ile Arg Val Pro Thr His 198	O Glu C I I I I I I I I I I I I I I I I I I	Gln Arg Cys Phe 1859 Gly Ala 1870 Asp Ala Val His Leu Lys Gly Gly 1939 Leu Phe 1950 Ala Pro Leu Glu	Gln 1840 Tle 5 Asp Gln Ile Lys 1920 Asn 5 Asp Glu Gln
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe 1875 Ala Gln Asp Arg 1890 Tyr Arg Leu Ile 1905 Ala Asn Gln Lys Phe Thr Thr Ala 194 Met Pro Leu Glu 1955 Glu Glu Glu Glu 1970 Ala Leu Cys Arg	Arg Leu 1836 Arg Phe 1845 Ser Gly 0 Tyr Asp Cys His Ser Glu 1916 Arg Met 1925 Tyr Phe 0 Glu Pro Thr Val	Asp Gly Asn Ala Gly Val Ser Asp 188 Arg Ile 1895 Arg Thr Leu Gly Lys Gln Ser Ser 196 Ala Ser 1975 Asp Glu	Ser Thr Asp Lys 185 Gly Val 1865 Trp Asn O Gly Gln Val Glu Asp Met 193 Gln Thr 1945 Ser Ser O Lys Gln	Arg Val 1835 Arg Ile 0 Asn Leu Pro Thr Thr Arg 190 Glu Asn 1915 Ala Ile 0 Ile Arg Val Pro Thr His 198 Ile Arg	O Glu C I I I I I I I I I I I I I I I I I I	Gln Arg Cys Phe 1859 Gly Ala 1870 Asp Ala Val His Leu Lys Gly Gly 1939 Leu Phe 1950 Ala Pro Leu Glu	Gln 1840 11e 5 Asp Gln 11e Lys 1920 Asn 5 Asp Glu Gln Gln
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe 1875 Ala Gln Asp Arg 1890 Tyr Arg Leu Ile 1905 Ala Asn Gln Lys Phe Thr Thr Ala 194 Met Pro Leu Glu 1955 Glu Glu Glu Glu 1970 Ala Leu Cys Arg	Arg Leu 1836 Arg Phe 1845 Ser Gly O Tyr Asp Cys His Ser Glu 1916 Arg Met 1925 Tyr Phe O Glu Pro Thr Val Ala Glu 1999	Asp Gly Asn Ala Gly Val Ser Asp 188 Arg Ile 1895 Arg Thr Co Leu Gly Lys Gln Ser Ser 196 Ala Ser 1975 Asp Glu	Ser Thr Asp Lys 185 Gly Val 1865 Trp Asn O Gly Gln Val Glu Asp Met 1933 Gln Thr 1945 Ser Ser O Lys Gln Glu Asp	Arg Val 1835 Arg Ile 0 Asn Leu Pro Thr Thr Arg 190 Glu Asn 1915 Ala Ile 0 Ile Arg Val Pro Thr His 198 Ile Arg	O Glu C Thr C 1885 Asp V O Ile I Ser F 1965 Ile I O Ala F	Gln Arg Cys Phe 1859 Gly Ala 1870 Asp Ala Val His Leu Lys Gly Gly 1939 Leu Phe 1950 Ala Pro Leu Glu Ala Thr	Gln 1840 Ile 5 Asp Gln Ile Lys 1920 Asn 5 Asp Glu Gln Gln 2000
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe 1875 Ala Gln Asp Arg 1890 Tyr Arg Leu Ile 1905 Ala Asn Gln Lys Phe Thr Thr Ala 194 Met Pro Leu Glu 1955 Glu Glu Glu Glu 1970 Ala Leu Cys Arg	Arg Leu 1836 Arg Phe 1845 Ser Gly 0 Tyr Asp Cys His Ser Glu 1916 Arg Met 1925 Tyr Phe 0 Glu Pro Thr Val Ala Glu 1996 Gln Val	Asp Gly Asn Ala Gly Val Ser Asp 188 Arg Ile 1895 Arg Thr Co Leu Gly Lys Gln Ser Ser 196 Ala Ser 1975 Asp Glu	Ser Thr Asp Lys 185 Gly Val 1865 Trp Asn O Gly Gln Val Glu Asp Met 193 Gln Thr 1945 Ser Ser O Lys Gln Glu Asp	Arg Val 1835 Arg Ile 0 Asn Leu Pro Thr Thr Arg 190 Glu Asn 1915 Ala Ile 0 Ile Arg Val Pro Thr His 198 Ile Arg 1995 Glu Phe	O Glu C Thr C 1885 Asp V O Ile I Ser F 1965 Ile I O Ala F	Gln Arg Cys Phe 1859 Gly Ala 1870 Asp Ala Val His Leu Lys Gly Gly 1939 Leu Phe 1950 Ala Pro Leu Glu Ala Thr	Gln 1840 11e 5 Asp Gln 11e Lys 1920 Asn 5 Asp Glu Gln Gln 2000 Asp
1810 His Leu Tyr Leu 1825 Ala Leu Met Glu Leu Ser Thr Arg 186 Thr Val Val Phe 1875 Ala Gln Asp Arg 1890 Tyr Arg Leu Ile 1905 Ala Asn Gln Lys Phe Thr Thr Ala 194 Met Pro Leu Glu 1955 Glu Glu Glu Glu 1970 Ala Leu Cys Arg	Arg Leu 1836 Arg Phe 1845 Ser Gly O Tyr Asp Cys His Ser Glu 1910 Arg Met 1925 Tyr Phe O Glu Pro Thr Val Ala Glu 1996 Gln Val 2005	Asp Gly Asn Ala Gly Val Ser Asp 188 Arg Ile 1895 Arg Thr Leu Gly Lys Gln Ser Ser 196 Ala Ser 1975 Asp Glu Ala Glu	Ser Thr Asp Lys 185 Gly Val 1865 Trp Asn 0 Gly Gln Val Glu Asp Met 1933 Gln Thr 1945 Ser Ser 0 Lys Gln Glu Asp	Arg Val 1835 Arg Ile 0 Asn Leu Pro Thr Thr Arg 190 Glu Asn 1915 Ala Ile 0 Val Pro Thr His 198 Ile Arg 1995 Glu Phe 0	O Glu C I I I I I I I I I I I I I I I I I I	Gln Arg Cys Phe 1859 Gly Ala 1870 Asp Ala Val His Leu Lys Gly Gly 1939 Leu Phe 1950 Ala Pro Ceu Glu Ala Thr Glu Asn 2019	Gln 1840 Ile 5 Asp Gln Ile Lys 1920 Asn 5 Asp Glu Gln Gln 2000 Asp

2020)		2025		2030	
Asp Glu Glu Met	Ser Arq Al			Ile Ala	Ala Leu	Val Glu
2035		2040			2045	
Gln Leu Thr Pro	Ile Glu A	rg Tyr 1	Ala Met	Lys Phe	Leu Glu	Ala Ser
2050		055		2060		01 - 1/al
Leu Glu Glu Val		lu Glu I	Leu Lys	Gin Ala	Glu Glu	Gin vai
2065	2070			2075	C1 V21	2080
Glu Ala Ala Arg		eu Asp (2090 2090	Lys Giu	GIU VAI	2095
Leu Pro Gln Glu	2085	Cl. 1			Asn Glu	
Leu Pro Gin Giu			2105	Ala Gly	211	0
Cys Gly Thr Gly	, Gly Gly Ti			Ser Lvs		
2115	G1, G1, 1.	2120		•	2125	_
Pro Glu Arg Pro	Gly Thr A	rg Val	Ser Glu	Arg Leu	Arg Gly	Ala Arg
2130	2:	135		2140	ŀ	
Ala Glu Thr Gln	Gly Ala A	sn His '	Thr Pro	Val Ile	Ser Ala	His Gln
2145	2150			2155		2160
Thr Arg Ser Thr	Thr Thr P	ro Pro			Ala Arg	Glu Arg
•	2165		2170		71- Co-	2175
Val Pro Arg Pro				Thr Pro	219	Ala Plo
2180 Ala Ala Ile Pro	Dan Lou V		2185 Val Pro	Val Ser		
2195	Ala Leu V	2200		var ocr	2205	
Ile Ser Ala Pro	Asn Pro I			Pro Val		Leu Pro
2210		215		2220)	
Ser Pro Pro Pro	Pro Ser G	ln Ile	Pro Pro	Cys Ser	Ser Pro	Ala Cys
2225	2230			2235		2240
Thr Pro Pro Pro	Ala Cys T	hr Pro			Thr Pro	Pro Pro
	2245		2250		T T	2255
				Pro Leu	Leu Leu	
Ala Gln Thr Cys						
226	0		2265		227	0
226 Pro Ser Val Pro	0	la Ser	2265 Val Thr		Pro Leu	0
226 Pro Ser Val Pro 2275	0 Ile Ser A	la Ser 2280	2265 Val Thr	Asn Leu	227 Pro Leu 2285	0 Gly Leu
226 Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290	O Ile Ser A Glu Leu C 2	la Ser 2280 Ys Ala	2265 Val Thr Gln Ala	Asn Leu Leu Ala 2300	227 Pro Leu 2285 Ser Pro	0 Gly Leu Glu Ser
226 Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290	O Ile Ser A Glu Leu C 2	la Ser 2280 Ys Ala	2265 Val Thr Gln Ala	Asn Leu Leu Ala 2300	227 Pro Leu 2285 Ser Pro	0 Gly Leu Glu Ser
226 Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala	O Ile Ser A Glu Leu C 2 Ser Val A 2310	la Ser 2280 Cys Ala 2295 La Ser	2265 Val Thr Gln Ala Ser Glu	Asn Leu Leu Ala 2300 Thr Ser 2315	Pro Leu 2285 Ser Pro Ser Leu	Gly Leu Glu Ser Ser Leu 2320
226 Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala	O Ile Ser A Glu Leu C 2 Ser Val A 2310 Asp Leu L	la Ser 2280 Cys Ala 2295 La Ser	2265 Val Thr Gln Ala Ser Glu Val Ala	Asn Leu Leu Ala 2300 Thr Ser 2315 Val Glu	Pro Leu 2285 Ser Pro Ser Leu	Gly Leu Glu Ser Ser Leu 2320 Pro Val
Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala 2305 Val Pro Pro Lys	O Ile Ser A Glu Leu C 2 Ser Val A 2310 Asp Leu L 2325	2280 Cys Ala 2295 Lla Ser Leu Pro	2265 Val Thr Gln Ala Ser Glu Val Ala 2330	Asn Leu Leu Ala 2300 Thr Ser 2315 Val Glu	Pro Leu 2285 Ser Pro Ser Leu	Gly Leu Glu Ser Ser Leu 2320 Pro Val 2335
Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala 2305 Val Pro Pro Lys Ser Glu Lys Asn	O Ile Ser A Glu Leu C 2 Ser Val A 2310 Asp Leu L 2325 Leu Ser L	lla Ser 2280 Cys Ala 2295 Lla Ser Leu Pro	2265 Val Thr Gln Ala Ser Glu Val Ala 2330 Pro Ser	Asn Leu Leu Ala 2300 Thr Ser 2315 Val Glu	Pro Leu 2285 Ser Pro Ser Leu Ile Leu Ser Leu	Gly Leu Glu Ser Ser Leu 2320 Pro Val 2335 Thr Leu
Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala 2305 Val Pro Pro Lys Ser Glu Lys Asn 234	O Ile Ser A Glu Leu C 2 Ser Val A 2310 Asp Leu L 2325 Leu Ser L	la Ser 2280 Cys Ala 2295 la Ser Leu Pro	2265 Val Thr Gln Ala Ser Glu Val Ala 2330 Pro Ser 2345	Asn Leu Leu Ala 2300 Thr Ser 2315 Val Glu Ala Pro	Pro Leu 2285 Ser Pro Ser Leu Ile Leu Ser Leu 235	Gly Leu Glu Ser Ser Leu 2320 Pro Val 2335 Thr Leu 0
Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala 2305 Val Pro Pro Lys Ser Glu Lys Asn 234 Glu Ala Gly Ser	O Ile Ser A Glu Leu C 2 Ser Val A 2310 Asp Leu L 2325 Leu Ser L	lla Ser 2280 Cys Ala 2295 Lla Ser Leu Pro Leu Thr	2265 Val Thr Gln Ala Ser Glu Val Ala 2330 Pro Ser 2345 Gln Glu	Asn Leu Leu Ala 2300 Thr Ser 2315 Val Glu Ala Pro	Pro Leu 2285 Ser Pro Ser Leu Ile Leu 235 Ala Pro	Gly Leu Glu Ser Ser Leu 2320 Pro Val 2335 Thr Leu 0
Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala 2305 Val Pro Pro Lys Ser Glu Lys Asn 234 Glu Ala Gly Ser 2355	O Ile Ser A Glu Leu C 2 Ser Val A 2310 Asp Leu L 2325 Leu Ser L O Ile Pro A	la Ser 2280 Cys Ala 2295 La Ser Leu Pro Leu Thr Lsn Gly 2360	2265 Val Thr Gln Ala Ser Glu Val Ala 2330 Pro Ser 2345 Gln Glu	Asn Leu Leu Ala 2300 Thr Ser 2315 Val Glu Ala Pro Gln Glu	Pro Leu 2285 Ser Pro Ser Leu Ile Leu 235 Ala Pro 2365	Gly Leu Glu Ser Ser Leu 2320 Pro Val 2335 Thr Leu Asp Ser
Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala 2305 Val Pro Pro Lys Ser Glu Lys Asn 234 Glu Ala Gly Ser 2355 Ala Glu Gly Thr	O Ile Ser A Glu Leu C 2 Ser Val A 2310 Asp Leu L 2325 Leu Ser L O Ile Pro A	la Ser 2280 Cys Ala 2295 La Ser Leu Pro Leu Thr Lsn Gly 2360	2265 Val Thr Gln Ala Ser Glu Val Ala 2330 Pro Ser 2345 Gln Glu	Asn Leu Leu Ala 2300 Thr Ser 2315 Val Glu Ala Pro Gln Glu	227 Pro Leu 2285 Ser Pro Ser Leu 11e Leu 235 Ala Pro 2365 Glu Glu	Gly Leu Glu Ser Ser Leu 2320 Pro Val 2335 Thr Leu Asp Ser
Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala 2305 Val Pro Pro Lys Ser Glu Lys Asn 234 Glu Ala Gly Ser 2355 Ala Glu Gly Thr 2370	O Ile Ser A Glu Leu C 2 Ser Val A 2310 Asp Leu L 2325 Leu Ser L O Ile Pro A Thr Leu T	lla Ser 2280 ys Ala 295 lla Ser Leu Pro Leu Thr Asn Gly 2360 Chr Val	2265 Val Thr Gln Ala Ser Glu Val Ala 2330 Pro Ser 2345 Gln Glu Leu Pro	Asn Leu Leu Ala 2300 Thr Ser 2315 Val Glu Ala Pro Gln Glu Glu Gly 2380	Pro Leu 2285 Ser Pro Ser Leu Ile Leu 235 Ala Pro 2365 Glu Glu	Gly Leu Glu Ser Ser Leu 2320 Pro Val 2335 Thr Leu 0 Asp Ser Leu Pro
Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala 2305 Val Pro Pro Lys Ser Glu Lys Asn 234 Glu Ala Gly Ser 2355 Ala Glu Gly Thr 2370 Leu Cys Val Ser 2385	Glu Leu C Ser Val A 2310 Asp Leu L 2325 Leu Ser L Ile Pro A Thr Leu T 2390	lla Ser 2280 ys Ala 295 lla Ser Leu Pro Leu Thr Asn Gly 2360 Chr Val 2375 Asn Gly	2265 Val Thr Gln Ala Ser Glu Val Ala 2330 Pro Ser 2345 Gln Glu Leu Pro Leu Glu	Asn Leu Leu Ala 2300 Thr Ser 2315 Val Glu Ala Pro Gln Glu Glu Gly 2380 Leu Pro 2395	Pro Leu 2285 Ser Pro Ser Leu Ile Leu 235 Ala Pro 2365 Glu Glu Pro Ser	Gly Leu Glu Ser Ser Leu 2320 Pro Val 2335 Thr Leu Asp Ser Leu Pro Ala Ala 2400
Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala 2305 Val Pro Pro Lys Ser Glu Lys Asn 234 Glu Ala Gly Ser 2355 Ala Glu Gly Thr 2370 Leu Cys Val Ser	Glu Leu C Ser Val A 2310 Asp Leu L 2325 Leu Ser L Ile Pro A Thr Leu T 2390	lla Ser 2280 ys Ala 295 lla Ser Leu Pro Leu Thr Asn Gly 2360 Chr Val 2375 Asn Gly	2265 Val Thr Gln Ala Ser Glu Val Ala 2330 Pro Ser 2345 Gln Glu Leu Pro Leu Glu	Asn Leu Leu Ala 2300 Thr Ser 2315 Val Glu Ala Pro Gln Glu Glu Gly 2380 Leu Pro 2395	Pro Leu 2285 Ser Pro Ser Leu Ile Leu 235 Ala Pro 2365 Glu Glu Pro Ser	Gly Leu Glu Ser Ser Leu 2320 Pro Val 2335 Thr Leu 0 Asp Ser Leu Pro Ala Ala 2400 Ser Glu
Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala 2305 Val Pro Pro Lys Ser Glu Lys Asn 234 Glu Ala Gly Ser 2355 Ala Glu Gly Thr 2370 Leu Cys Val Ser 2385 Ser Asp Glu Pro	O Ile Ser A Glu Leu C 2 Ser Val A 2310 Asp Leu L 2325 Leu Ser L O Ile Pro A Thr Leu T 2390 Leu Gln G 2405	lla Ser 2280 295 Ala 295 Lla Ser Leu Pro Leu Thr Asn Gly 2360 Chr Val 2375 Asn Gly	2265 Val Thr Gln Ala Ser Glu Val Ala 2330 Pro Ser 2345 Gln Glu Leu Pro Leu Glu 2410	Asn Leu Leu Ala 2300 Thr Ser 2315 Val Glu Ala Pro Gln Glu Glu Gly 2380 Leu Pro 2395 Ala Asp	Pro Leu 2285 Ser Pro Ser Leu Ile Leu 235 Ala Pro 2365 Glu Glu Pro Ser Arg Thr	Gly Leu Glu Ser Ser Leu 2320 Pro Val 2335 Thr Leu Asp Ser Leu Pro Ala Ala 2400 Ser Glu 2415
Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala 2305 Val Pro Pro Lys Ser Glu Lys Asn 234 Glu Ala Gly Ser 2355 Ala Glu Gly Thr 2370 Leu Cys Val Ser 2385 Ser Asp Glu Pro Glu Leu Thr Glu	Ile Ser A Glu Leu C 2 Ser Val A 2310 Asp Leu L 2325 Leu Ser L 0 Ile Pro A Thr Leu T 2 Glu Ser A 2390 Leu Gln G 2405 Ala Lys T	lla Ser 2280 ys Ala 295 lla Ser eu Pro eu Thr Asn Gly 2360 thr Val 2375 Asn Gly	2265 Val Thr Gln Ala Ser Glu Val Ala 2330 Pro Ser 2345 Gln Glu Leu Pro Leu Glu 2410 Thr Ser	Asn Leu Leu Ala 2300 Thr Ser 2315 Val Glu Ala Pro Gln Glu Glu Gly 2380 Leu Pro 2395 Ala Asp	Pro Leu 2285 Ser Pro Ser Leu Ile Leu 235 Ala Pro 2365 Glu Glu Pro Ser Arg Thr	Gly Leu Glu Ser Ser Leu 2320 Pro Val 2335 Thr Leu Asp Ser Leu Pro Ala Ala 2400 Ser Glu 2415 Pro Gln
Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala 2305 Val Pro Pro Lys Ser Glu Lys Asn 234 Glu Ala Gly Ser 2355 Ala Glu Gly Thr 2370 Leu Cys Val Ser 2385 Ser Asp Glu Pro Glu Leu Thr Glu 242	Ile Ser A Glu Leu C 2 Ser Val A 2310 Asp Leu L 2325 Leu Ser L Ile Pro A Thr Leu T 2390 Leu Glu Ser A 2390 Leu Glu Ser A 2405 Ala Lys T	lla Ser 2280 Lys Ala 2295 Lla Ser Leu Pro Leu Thr LSn Gly 2360 Chr Val 2375 LSn Gly Glu Pro Chr Pro	2265 Val Thr Gln Ala Ser Glu Val Ala 2330 Pro Ser 2345 Gln Glu Leu Pro Leu Glu 2410 Thr Ser 2425	Asn Leu Leu Ala 2300 Thr Ser 2315 Val Glu Ala Pro Gln Glu Glu Gly 2380 Leu Pro 2395 Ala Asp	Pro Leu 2285 Ser Pro Ser Leu Ile Leu Ser Leu 235 Ala Pro 2365 Glu Glu Pro Ser Arg Thr Glu Lys 243	Gly Leu Glu Ser Ser Leu 2320 Pro Val 2335 Thr Leu Asp Ser Leu Pro Ala Ala 2400 Ser Glu 2415 Pro Gln 0
Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala 2305 Val Pro Pro Lys Ser Glu Lys Asn 234 Glu Ala Gly Ser 2355 Ala Glu Gly Thr 2370 Leu Cys Val Ser 2385 Ser Asp Glu Pro Glu Leu Thr Glu 242 Glu Leu Val Thr	Ile Ser A Glu Leu C 2 Ser Val A 2310 Asp Leu L 2325 Leu Ser L Ile Pro A Thr Leu T 2390 Leu Glu Ser A 2390 Leu Glu Ser A 2405 Ala Lys T	cla Ser 2280 cys Ala 2295 cla Ser ceu Pro ceu Thr csn Gly 2360 chr Val cars csn Gly csn Ala	2265 Val Thr Gln Ala Ser Glu Val Ala 2330 Pro Ser 2345 Gln Glu Leu Pro Leu Glu Leu Glu 2410 Thr Ser 2425 Ala Pro	Asn Leu Leu Ala 2300 Thr Ser 2315 Val Glu Ala Pro Gln Glu Glu Gly 2380 Leu Pro 2395 Ala Asp	Pro Leu 2285 Ser Pro Ser Leu Ile Leu 235 Ala Pro 2365 Glu Glu Pro Ser Arg Thr Glu Lys 243 Ser Ser	Gly Leu Glu Ser Ser Leu 2320 Pro Val 2335 Thr Leu Asp Ser Leu Pro Ala Ala 2400 Ser Glu 2415 Pro Gln 0
Pro Ser Val Pro 2275 Arg Pro Glu Ala 2290 Leu Glu Leu Ala 2305 Val Pro Pro Lys Ser Glu Lys Asn 234 Glu Ala Gly Ser 2355 Ala Glu Gly Thr 2370 Leu Cys Val Ser 2385 Ser Asp Glu Pro Glu Leu Thr Glu 242	Glu Leu C Ser Val A 2310 Asp Leu L 2325 Leu Ser L Ile Pro A Thr Leu T 2390 Leu Gln G 2405 Ala Lys T 0 Ala Glu V	cla Ser 2280 Cys Ala 2295 Lla Ser Leu Pro Leu Thr Lsn Gly 2360 Chr Val 2375 Lsn Gly Glu Pro Chr Pro 7al Ala 2440	2265 Val Thr Gln Ala Ser Glu Val Ala 2330 Pro Ser 2345 Gln Glu Leu Pro Leu Glu 2410 Thr Ser 2425 Ala Pro	Asn Leu Leu Ala 2300 Thr Ser 2315 Val Glu Ala Pro Gln Glu Glu Gly 2380 Leu Pro 2395 Ala Asp Ser Pro Ser Thr	Pro Leu 2285 Ser Pro Ser Leu Ile Leu Ser Leu 235 Ala Pro 2365 Glu Glu Pro Ser Arg Thr Glu Lys 243 Ser Ser	Gly Leu Glu Ser Ser Leu 2320 Pro Val 2335 Thr Leu Asp Ser Leu Pro Ala Ala 2400 Ser Glu 2415 Pro Gln Ser Ala

2450	3.	455		2460		
2450 Thr Ser Ala Asp			lu Gla Gly		Ara Pr	n Glv
	2470	TE AIG G	19 GIN G19 247!	:		2480
2465 Gln Pro Pro Gly		al tou A			Ara Le	
GIU ALO ALO GIA		ar beu A	2490	110 017	24	95
Thr Val Val Glu	2485			Ara Ara		
				Arg Arg	2510	9
2500) _,		505	Clu The		a Ser
Gly Ala Ala Ser	Thr Leu Va		ry var ser	2525		a ser
2515		2520				- D
Pro Gly Ser Pro			et ser Giy	Pro Giu	ser se	I PIO
2530		535		2540	• D	_ mL
Pro Ile Gly Gly		lu Ala A			Leu Pr	
2545	2550		255		1	2560
Pro Pro Gln Gln		le Ala A		He Glu		
_	2565		2570		25	
Thr Gly Gly Gly				Ala Leu	Leu Al	a 11e
258			585		2590	
Thr Pro Pro Ala	Val Lys A		rg Gly Arg			s Asn
2595		2600		2605		
Arg Ser Pro Ala			ly Val Asp	Giu Ala	Pro Se	r Ser
2610		615		2620		a 1
Thr Leu Lys Gly	Lys Thr A	sn Gly A			GIY Pr	o GIU
2625	2630		263			2640
Thr Leu Ile Val		ro Val L		Gln Leu	He Pr	o gra
	2645		2650	_		55
Pro Gln Pro Leu	Gly Pro G			Pro Asn		u Leu
266			665		2670	
Ser Pro Val Glu	Lys Arg A		ly Arg Pro			g Asp
2675		2680		2685	5	
	Gly Thr I	2680 le Ser S		2689 Asp Gly	5	
2675 Leu Pro Ile Pro 2690	Gly Thr I	2680 le Ser S 695	er Ala Gly	2685 Asp Gly 2700	Asn Se	r Glu
2675 Leu Pro Ile Pro	Gly Thr I	2680 le Ser S 695	er Ala Gly ro Ser Pro	2689 Asp Gly 2700 Leu Thr	Asn Se	r Glu u Pro
2675 Leu Pro Ile Pro 2690 Ser Arg Thr Gln 2705	Gly Thr I 2 Pro Pro P 2710	2680 le Ser S 695 ro His P	er Ala Gly Pro Ser Pro 271	2689 Asp Gly 2700 Leu Thr	Asn Se	r Glu u Pro 2720
2675 Leu Pro Ile Pro 2690 Ser Arg Thr Gln	Gly Thr I 2 Pro Pro P 2710 Cys Pro T	2680 le Ser S 695 ro His P	er Ala Gly ro Ser Pro 271 hr Val Ala	2689 Asp Gly 2700 Leu Thr	Asn Se Pro Le Val Th	r Glu u Pro 2720 r Thr
2675 Leu Pro Ile Pro 2690 Ser Arg Thr Gln 2705 Pro Leu Leu Val	Gly Thr I 2 Pro Pro P 2710 Cys Pro T 2725	2680 le Ser S 695 ro His P hr Ala T	er Ala Gly ro Ser Pro 271 hr Val Ala 2730	2689 Asp Gly 2700 Leu Thr S	Asn Se Pro Le Val Th	r Glu ou Pro 2720 or Thr
2675 Leu Pro Ile Pro 2690 Ser Arg Thr Gln 2705 Pro Leu Leu Val Val Thr Ile Ser	Gly Thr I 22 Pro Pro P 2710 Cys Pro T 2725 Thr Ser P	2680 The Ser S 695 Pro His P Thr Ala T	er Ala Gly ro Ser Pro 271 rhr Val Ala 2730 rys Arg Lys	2689 Asp Gly 2700 Leu Thr S	Asn Se Pro Le Val Th 27 Arg Pr	r Glu ou Pro 2720 or Thr
2675 Leu Pro Ile Pro 2690 Ser Arg Thr Gln 2705 Pro Leu Leu Val Val Thr Ile Ser 274	Gly Thr I 2 Pro Pro P 2710 Cys Pro T 2725 Thr Ser P	2680 le Ser S 695 ro His P rhr Ala T ro Pro L	er Ala Gly ro Ser Pro 271 thr Val Ala 2730 rys Arg Lys	Asp Gly 2700 Leu Thr 5 Asn Thr	Asn Se Pro Le Val Th 27 Arg Pr 2750	u Pro 2720 r Thr 35
2675 Leu Pro Ile Pro 2690 Ser Arg Thr Gln 2705 Pro Leu Leu Val Val Thr Ile Ser 274 Lys Asn Pro Pro	Gly Thr I 2 Pro Pro P 2710 Cys Pro T 2725 Thr Ser P	2680 le Ser S 695 ro His P rhr Ala T ro Pro L 2 rg Pro S	er Ala Gly ro Ser Pro 271 thr Val Ala 2730 rys Arg Lys	Asp Gly 2700 Leu Thr S Asn Thr Arg Gly	Asn Se Pro Le Val Th 27 Arg Pr 2750 Leu As	u Pro 2720 r Thr 35
2675 Leu Pro Ile Pro 2690 Ser Arg Thr Gln 2705 Pro Leu Leu Val Val Thr Ile Ser 274 Lys Asn Pro Pro 2755	Gly Thr I 2 Pro Pro P 2710 Cys Pro T 2725 Thr Ser P 0 Ser Pro A	2680 The Ser S 695 The His P The Ala T The Pro L 2 The Pro S 2760	er Ala Gly ro Ser Pro 271 rhr Val Ala 2730 rys Arg Lys 745 er Gln Leu	Asp Gly 2700 Leu Thr 5 Asn Thr Arg Gly Pro Val 276	Asn Se Pro Le Val Th 27 Arg Pr 2750 Leu As	u Pro 2720 r Thr 35 o Pro
2675 Leu Pro Ile Pro 2690 Ser Arg Thr Gln 2705 Pro Leu Leu Val Val Thr Ile Ser 274 Lys Asn Pro Pro 2755 Asp Ser Thr Ser	Gly Thr I 2 Pro Pro P 2710 Cys Pro T 2725 Thr Ser P 0 Ser Pro A	2680 le Ser S 695 ro His P ro Pro L 2 rg Pro S 2760 ilu Ser C	er Ala Gly ro Ser Pro 271 rhr Val Ala 2730 rys Arg Lys 745 er Gln Leu	Asp Gly 2700 Leu Thr 5 Asn Thr Arg Gly Pro Val 2769 Gly Arg	Asn Se Pro Le Val Th 27 Arg Pr 2750 Leu As	u Pro 2720 r Thr 35 o Pro
2675 Leu Pro Ile Pro 2690 Ser Arg Thr Gln 2705 Pro Leu Leu Val Val Thr Ile Ser 274 Lys Asn Pro Pro 2755 Asp Ser Thr Ser	Gly Thr I 2 Pro Pro P 2710 Cys Pro T 2725 Thr Ser P 0 Ser Pro A Val Leu G 2	2680 The Ser S 695 The His P The Ala T The Pro L 2 The Pro S 2760 Thu Ser C	er Ala Gly ro Ser Pro 271 rhr Val Ala 2730 rys Arg Lys 745 er Gln Leu rys Gly Leu	Asp Gly 2700 Leu Thr 5 Asn Thr Arg Gly Pro Val 2769 Gly Arg 2780	Asn Se Pro Le Val Th 27 Arg Pr 2750 Leu As Arg Ar	u Pro 2720 r Thr 35 ro Pro p Arg
Leu Pro Ile Pro 2690 Ser Arg Thr Gln 2705 Pro Leu Leu Val Val Thr Ile Ser 274 Lys Asn Pro Pro 2755 Asp Ser Thr Ser 2770 Pro Gln Gly Gln	Gly Thr I 2 Pro Pro P 2710 Cys Pro T 2725 Thr Ser P 0 Ser Pro A Val Leu G 2 Gly Glu S	2680 The Ser S 695 The His P The Ala T The Pro L 2 The Pro S 2760 Thu Ser C	er Ala Gly ro Ser Pro 271 rhr Val Ala 2730 rys Arg Lys 745 rer Gln Leu rys Gly Leu	2689 Asp Gly 2700 Leu Thr 5 Asn Thr Arg Gly Pro Val 2769 Gly Arg 2780 Ser Asp	Asn Se Pro Le Val Th 27 Arg Pr 2750 Leu As Arg Ar	u Pro 2720 r Thr 35 o Pro p Arg g Gln
2675 Leu Pro Ile Pro 2690 Ser Arg Thr Gln 2705 Pro Leu Leu Val Val Thr Ile Ser 274 Lys Asn Pro Pro 2755 Asp Ser Thr Ser 2770 Pro Gln Gly Gln 2785	Gly Thr I 2 Pro Pro P 2710 Cys Pro T 2725 Thr Ser P 0 Ser Pro A Val Leu G 2 Gly Glu S 2790	2680 le Ser S 695 ro His P rhr Ala T ro Pro L 2 rg Pro S 2760 clu Ser C 775 eer Glu G	er Ala Gly ro Ser Pro 271 rr Val Ala 2730 rys Arg Lys 745 rer Gln Leu rys Gly Leu rly Ser Ser 279	Asp Gly 2700 Leu Thr 5 Asn Thr Arg Gly Pro Val 2760 Gly Arg 2780 Ser Asp	Asn Se Pro Le Val Th 27 Arg Pr 2750 Leu As Arg Ar	r Glu r Glu r Pro 2720 r Thr 35 r Pro p Arg g Gln r Gly 2800
2675 Leu Pro Ile Pro 2690 Ser Arg Thr Gln 2705 Pro Leu Leu Val Val Thr Ile Ser 274 Lys Asn Pro Pro 2755 Asp Ser Thr Ser 2770 Pro Gln Gly Gln 2785 Ser Arg Pro Leu	Gly Thr I 2 Pro Pro P 2710 Cys Pro T 2725 Thr Ser P 0 Ser Pro A Val Leu G 2 Gly Glu S 2790 Thr Arg L	2680 le Ser S 695 ro His P thr Ala T ro Pro L 2760 riu Ser C 775 rer Glu G	er Ala Gly ro Ser Pro 271 rhr Val Ala 2730 rys Arg Lys 745 rer Gln Leu rys Gly Leu rly Ser Ser 279 rrg Leu Arg	Asp Gly 2700 Leu Thr 5 Asn Thr Arg Gly Pro Val 2769 Gly Arg 2780 Ser Asp 5 Leu Glu	Asn Se Pro Le Val Th 27 Arg Pr 2750 Leu As Arg Ar	r Glu 2720 r Thr 35 r Pro p Arg g Gln p Gly 2800 u Gly
2675 Leu Pro Ile Pro 2690 Ser Arg Thr Gln 2705 Pro Leu Leu Val Val Thr Ile Ser 274 Lys Asn Pro Pro 2755 Asp Ser Thr Ser 2770 Pro Gln Gly Gln 2785 Ser Arg Pro Leu	Gly Thr I Pro Pro P 2710 Cys Pro T 2725 Thr Ser Pro A Val Leu G 2 Gly Glu S 2790 Thr Arg L 2805	2680 le Ser S 695 ro His P rhr Ala T ro Pro L 2760 clu Ser C 775 ler Glu G eu Ala A	er Ala Gly fro Ser Pro 271 fr Val Ala 2730 fys Arg Lys 745 fer Gln Leu fys Gly Leu fly Ser Ser 279 frg Leu Arg 2810	Asp Gly 2700 Leu Thr 5 Asn Thr Arg Gly Pro Val 2769 Gly Arg 2780 Ser Asp 5 Leu Glu	Asn Se Pro Le Val Th 27 Arg Pr 2750 Leu As Arg Ar	r Glu u Pro 2720 r Thr 35 o Pro p Arg g Gln p Gly 2800 u Gly 15
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Pro			•		D		21-	C1	777	Th~		ת ות	C1 v	Clv	
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Gln 545 Val Ser Asp Val Pro 625 Thr Glu	Leu 530 His Asn Gln Ala Ser 610 Thr Leu Gly	S15 Pro Phe Glu Leu Gly 595 Thr Asp Val Gly Gly 619	Pro Val Val Ser 580 Glu Lys Gly Arg Ala 660 Gly	Ser Met Arg 565 Asp Ala Ser Ala Val 645 Asn Ser	Pro Val 550 Ala Ser Glu Arg Asn 630 Lys Thr	Ser 535 Glu Leu Gly Ala Ser 615 Lys Lys Arg	520 Gly Val Pro Gln Ser 600 Ser Pro Gln Asn 680	His Gln Thr 585 Ala Lys Pro Ala Pro 665 Cys	Pro Arg Thr 570 Leu Pro Glu Gly Ala 650 Leu Gly	Asp Pro 555 Arg Ser Gly Leu Leu 635 Thr	Gln 540 Asp Thr Glu Arg Pro 620 Leu Leu Arg	525 Thr Ser Ala Asp Gly 605 Arg Glu Gly Ile Lys 685	Gly Glu Ser Ser 590 Arg Asn Pro Ile Val 670 Val	Thr Pro Thr 575 Gly Gln Glu Thr Ala 655 Thr	Asn Asp S60 Leu Val Ser Arg Ser 640 Ile Ile His
Gln 545 Val Ser Asp Val Pro 625 Thr Glu	Leu 530 His Asn Gln Ala Ser 610 Thr Leu Gly	S15 Pro Phe Glu Leu Gly 595 Thr Asp Val Gly Gly 619	Pro Val Val Ser 580 Glu Lys Gly Arg Ala 660 Gly	Ser Met Arg 565 Asp Ala Ser Ala Val 645 Asn Ser	Pro Val 550 Ala Ser Glu Arg Asn 630 Lys Thr	Ser 535 Glu Leu Gly Ala Ser 615 Lys Lys Arg	520 Gly Val Pro Gln Ser 600 Ser Pro Gln Asn 680	His Gln Thr 585 Ala Lys Pro Ala Pro 665 Cys	Pro Arg Thr 570 Leu Pro Glu Gly Ala 650 Leu Gly	Asp Pro 555 Arg Ser Gly Leu Leu 635 Thr	Gln 540 Asp Thr Glu Arg Pro 620 Leu Leu Arg	525 Thr Ser Ala Asp Gly 605 Arg Glu Gly Ile Lys 685	Gly Glu Ser Ser 590 Arg Asn Pro Ile Val 670 Val	Thr Pro Thr 575 Gly Gln Glu Thr Ala 655 Thr	Asn Asp S60 Leu Val Ser Arg Ser 640 Ile

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700
                        695
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Glu Ala Ala Arg Ile Ile Ala Glu Ala Phe Lys Thr Lys Asp Arg Asp
                    710
Tyr Ile Asp Phe Leu Val Thr Glu Phe Asn Val Met Leu
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teggggatec tetegeetga eteeggeagt ategaactgg etetgeegga eegeacegte
aacgtcgaaa acctctctaa cgaaggccga gcaaagctac gccgtcaatc ccttggtttc
gtottocaac aaggaatgot ogtacoogag otcactgotg togagaacac ogcootacco
ctcatgctta acggcgtatc ccaaaccgat gcggtcaggt atgccaccca atggcttgaa
tcgatggggt taggcggcat ggaggatcgt cggattggtc agctctccgg gggccaagct
420
caacgcgtca ctattgcccg gtcccaggta atcgatccgt cgattgtctt cgctgacgaa
480
cccaccggag ccctcgactc agccaccgcc gtcgaagtca tggccattct gctttcggcg
540
acgaccgggc ggggacgcac cetegtegte gteacceatg acgaggacgt tgecegeege
tgccagcgca tccttcatct gcacgacggt cggatcgtct ctgaccacgt acgtcattcc
gatgggaggt ggtgatcatg actataacgc cccctatcga accgggaacc gccgatcaaa
ggatecegte ceteceegte eeegageeee tgggagetac geeeggaegt ettaceaetg
ctgcgatcct cagcatgacc ctccgtgcct cagccgctga ccactccacc tggcggttgc
cggtagttgc tttcgctgtc attgcaacca tcatcctcga cgtcactggc ggtgccgtca
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957
<210> 1994
<211> 224
<212> PRT
<213> Homo sapiens
<400> 1994
Xaa Lys Thr Tyr Gly Met Thr Arg Ala Leu Asp His Ile Asp Ile Ala
                                    10
Ile Pro Ala Gly Gln Ser Val Ala Val Met Gly Pro Ser Gly Ser Gly
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25
          20
Lys Thr Thr Leu Leu His Cys Leu Ser Gly Ile Leu Ser Pro Asp Ser
                                   45
                        40
Gly Ser Ile Glu Leu Ala Leu Pro Asp Arg Thr Val Asn Val Glu Asn
                  55
                                    60
Leu Ser Asn Glu Gly Arg Ala Lys Leu Arg Arg Gln Ser Leu Gly Phe
                                   75
                 70
Val Phe Gln Gln Gly Met Leu Val Pro Glu Leu Thr Ala Val Glu Asn
                      90
             85
Thr Ala Leu Pro Leu Met Leu Asn Gly Val Ser Gln Thr Asp Ala Val
                            105
                                             110
          100
Arg Tyr Ala Thr Gln Trp Leu Glu Ser Met Gly Leu Gly Gly Met Glu
                                          125
                        120
Asp Arg Arg Ile Gly Gln Leu Ser Gly Gly Gln Ala Gln Arg Val Thr
                    135
Ile Ala Arg Ser Gln Val Ile Asp Pro Ser Ile Val Phe Ala Asp Glu
                150
                                   155
Pro Thr Gly Ala Leu Asp Ser Ala Thr Ala Val Glu Val Met Ala Ile
                               170
             165
Leu Leu Ser Ala Thr Thr Gly Arg Gly Arg Thr Leu Val Val Thr
                  185
His Asp Glu Asp Val Ala Arg Arg Cys Gln Arg Ile Leu His Leu His
                                           205
                      200
Asp Gly Arg Ile Val Ser Asp His Val Arg His Ser Asp Gly Arg Trp
                     215
<210> 1995
<211> 285
<212> DNA
<213> Homo sapiens
<400> 1995
catcaccacc attatcaaca ccatcatcac caccattatc acctttatca ccaccatcat
caccatcacc accatcatca ctaccaccat cacgcccatc atcatgtgat gactctcaat
actgtcctca tcatgtgtga cttggactgt ggaccagece ctcgggctct gctctgctga
octatattot tigiciottig ticolgagaa golgggagit gagacccagi aaggigitgi
acagacactt gtgaccccaa attccatgag acagaggacc tcccn
<210> 1996
<211> 59
<212> PRT
<213> Homo sapiens
<400> 1996
His His His His Tyr Gln His His His His His Tyr His Leu Tyr
                         10
25
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          20
His His His Val Met Thr Leu Asn Thr Val Lèu Ile Met Cys Asp Leu
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45
        35
Asp Cys Gly Pro Ala Pro Arg Ala Leu Leu Cys
    50
                        55
<210> 1997
<211> 313
<212> DNA
<213> Homo sapiens
<400> 1997
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120
ggtggcggca tcggttttta cgacggcctg ttcgggccgg gtaccggcag tttcctgatg
ttcctgttcg tgcggttttt gcgttttgat ttcttgcatg cttctgccgc ggccaaggtt
gtcaacctgg ccaccaatgt ggcggcactg tgctttttca ttcccagcgg caatgtgctg
300
tatggctacg cgt
313
<210> 1998
<211> 104
<212> PRT
<213> Homo sapiens
<400> 1998
Pro Leu Val Val Leu Leu Ile Gly Met Ala Ile Tyr Thr Phe Arg
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Lys Lys Asp Leu Gly Lys Leu His Lys Pro Val Ser Ile Gly Arg Arg
                                                    30
            20
Glu Met Leu Val Gly Leu Ala Ile Gly Gly Gly Ile Gly Phe Tyr Asp
                                                45
                            40
Gly Leu Phe Gly Pro Gly Thr Gly Ser Phe Leu Met Phe Leu Phe Val
                        55
                                            60
Arg Phe Leu Arg Phe Asp Phe Leu His Ala Ser Ala Ala Ala Lys Val
                                        75
                    70
Val Asn Leu Ala Thr Asn Val Ala Ala Leu Cys Phe Phe Ile Pro Ser
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                                    90
Gly Asn Val Leu Tyr Gly Tyr Ala
            100
<210> 1999
<211> 399
<212> DNA
<213> Homo sapiens
<400> 1999
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tecaetgege agagggeaga tgtgaagtae teeggtaetg tteattttae eggtgttgge
120
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ggaagaatgg atcttactct cgctgaccct gagattgtcg ttaacaatgg cgatgatcat
gtgattatgt ctgtgaagtc caagactatg gtcgggcagt tggttgacta tggccgtata
actttcgttg atatgaccgg ctctattacg cagggtcaaa acgatgcagc tcaggttgtg
gggaccaatg tcaagctgaa tagccaagcc gtcgatgcat tcgctggctt ctatcaagct
ggaaagccca tggatgacat cgattcgtcc ttaaagctt
399
<210> 2000
<211> 91
<212> PRT
<213> Homo sapiens
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Met Asp Leu Thr Leu Ala Asp Pro Glu Ile Val Val Asn Asn Gly Asp
Asp His Val Ile Met Ser Val Lys Ser Lys Thr Met Val Gly Gln Leu
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Val Asp Tyr Gly Arg Ile Thr Phe Val Asp Met Thr Gly Ser Ile Thr
                                                45
                            40
       35
Gln Gly Gln Asn Asp Ala Ala Gln Val Val Gly Thr Asn Val Lys Leu
                        55
Asn Ser Gln Ala Val Asp Ala Phe Ala Gly Phe Tyr Gln Ala Gly Lys
                                        75
65
Pro Met Asp Asp Ile Asp Ser Ser Leu Lys Leu
                85
<210> 2001
<211> 1434
<212> DNA
<213> Homo sapiens
<400> 2001
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tttggcagga ccccactgca ctatgcagct gctaacggta gctaccagtg tgcagtaaca
ttggtgactg ctggggcagg tgtcaacgag gccgactgta aaggctgctc tcccctccac
tacgctgccg cttctgacac ttacaggnag agcggaaccc catacacctt ccagccatga
tgccgaagag ganncgagcc actgaaggag tcccgcagga aggaggcctt cttctgtctg
gagttettae tggataaegg tgeagaeeee teeetgeggg acaggeaggg etacaeaget
gtgcactatg cagccgccta tggcaacaga cagaacctcg aactgctctt agaaatgtcc
tttaactgcc tggaggatgt ggagagcacc attccagtca gccctttgca cttagctgcc
tacaacggtc actgtgaagc cttgaagacg ctggcggaga cgctggtgaa tctggacgta
540
```

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agggaccaca agggccggac cgcactcttc ctggccacgg agcgcggctc tactgagtgt
gtggaggtgc ttacagecca eggegeetet geceteatea aggagegeaa gegeaagtgg
acaccectge acgoegetge tgcctetgge cacactgact coetgeactt getgategac
agtggggaac gagctgacat cacagatgtc atggatgcct atggacagac cocactgatg
ctggccatca tgaatggcca tgtggactgt gtacatctgc tgctagagaa aggatccaca
840
getgatgetg etgaceteeg gggeegeact geettecace geggggeagt gaetggetgt
900
gaggactgcc tggctgccct gctggaccac gacgcatttg tgctgtgccg agactttaag
ggccgcacgc ccattcacct ggcctcagcc tgtggccaca ctgcagtact gcggaccctg
ctgcaggetg ccctttccac agatcccctg gatgccgggg tggattacag cggatactcg
1080
cccatgcact gggcctccta cactggacat gaagattgtc tggagttgtt acttgaacac
agcccgtttt cgtacctgga aggaaacccc ttcactcctt tgcactgtgc agtgattaat
1200
aaccaagaca gcaccacaga gatgctactg ggagctctgg gtgccaagat tgtgaacagc
1260
cgagatgcca aaggacggac ccccttcac gccgctgcct tcgcggacaa tgtctctggg
1320
cteeggatge tgetgeagea teaagetgag gtgaacgeca ctgaccacac tggeegeact
gegeteatga eggeggetga gaaegggeag acegetgetg tggaatttet getg
1434
<210> 2002
<211> 79
<212> PRT
<213> Homo sapiens
<400> 2002
Xaa Asn Glu Gly Arg His Asn Leu Leu Ile Ser Ser Ala Ala Asp Trp
                                    10
Arg Arg Asp Lys Phe Gly Arg Thr Pro Leu His Tyr Ala Ala Ala Asn
            20
                                25
Gly Ser Tyr Gln Cys Ala Val Thr Leu Val Thr Ala Gly Ala Gly Val
        35
                            40
                                                45
Asn Glu Ala Asp Cys Lys Gly Cys Ser Pro Leu His Tyr Ala Ala Ala
                                            60
   50
                        55
Ser Asp Thr Tyr Arg Xaa Ser Gly Thr Pro Tyr Thr Phe Gln Pro
65
                    70
                                        75
<210> 2003
<211> 688
<212> DNA
<213> Homo sapiens
<400> 2003
```

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							# V

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40
Gly Ala Gly Phe Val Pro Val Arg Lys Pro Gly Lys Leu Pro Gly Gln
Val Tyr Ser Glu Thr Phe Ala Met Glu Tyr Gly Glu Glu Thr Leu Thr
                  70
                                      75
Val His Gln Tyr Ala Ile Lys Pro Gly Ser Arg Val Ile Ile Val Asp
                                   90
<210> 2011
<211> 384
<212> DNA
<213> Homo sapiens
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gaagtcaacg gtggacgacg ggttggaggg tttgttgatt ggcgagtggg gaagcgagca
gattgtaaat tggtagaacg gggaacagag attagtcaca atgacgagaa cgacaacaga
atgttgattg ttatagccat ctctggagga gagggaaaaa gccaggtatc tagacagcga
aagcaaatgt gageegaggg gacagtgeeg teettegtte eteggeaact eccaegagge
accttccatt ctgtgggcag aatt
<210> 2012
<211> 123
<212> PRT
<213> Homo sapiens
<400> 2012
Met Glu Gly Ala Ser Trp Glu Leu Pro Arg Asn Glu Gly Arg His Cys
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                5
Pro Leu Gly Ser His Leu Leu Ser Leu Ser Arg Tyr Leu Ala Phe Ser
                                                   30
                              25
Leu Ser Ser Arg Asp Gly Tyr Asn Asn Gln His Ser Val Val Leu
                            40
      35
Val Ile Val Thr Asn Leu Cys Ser Pro Phe Tyr Gln Phe Thr Ile Cys
                                           60
                       55
Ser Leu Pro His Ser Pro Ile Asn Lys Pro Ser Asn Pro Ser Ser Thr
                                       75
Val Asp Phe Tyr Ile Arg Pro Ser Gly Gly Phe Thr Gly Arg Leu Ala
                                   90
               85
Lys His Ala Gly Gly Gly Lys Ser Glu Thr Val Met Leu Tyr Gly Pro
                               105
           100
Tyr Gly Gly Val Asn Met Gln Arg Leu Leu Glu
                            120
        115
<210> 2013
<211> 309
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<212> DNA
<213> Homo sapiens
<400> 2013
gogtatocco acggotacgg catgacogcg ottatoggoo oggacotgto cacogtogaa
gccttgctcg cccaggtcca cagcacacaa accccggtgt acctggccaa tatcaatgcc
120
gataaccaga cggttatcgc gggcagcgac ggggcaatga aagcagtcgc caatctggtc
cgcggcaacg gcgtcgccaa acgcttggcc gtcagcgtgc cgtcccattg tgcgctgctg
240
gaaaaacctg ccgaaacact ggcccaagcc ttcgctgaag tgacgctgaa aacgccgncn
300
nnncccncn
309
<210> 2014
<211> 103
<212> PRT
<213> Homo sapiens
<400> 2014
Ala Tyr Pro His Gly Tyr Gly Met Thr Ala Leu Ile Gly Pro Asp Leu
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Ser Thr Val Glu Ala Leu Leu Ala Gln Val His Ser Thr Gln Thr Pro
                                25
                                                    30
            20
Val Tyr Leu Ala Asn Ile Asn Ala Asp Asn Gln Thr Val Ile Ala Gly
                            40
Ser Asp Gly Ala Met Lys Ala Val Ala Asn Leu Val Arg Gly Asn Gly
                                            60
                        55
   50
Val Ala Lys Arg Leu Ala Val Ser Val Pro Ser His Cys Ala Leu Leu
                                        75
                    70
Glu Lys Pro Ala Glu Thr Leu Ala Gln Ala Phe Ala Glu Val Thr Leu
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                85
Lys Thr Pro Xaa Xaa Pro Xaa
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<210> 2015
<211> 329
<212> DNA
<213> Homo sapiens
<400> 2015
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gatctaggcg ggccggacat ggcagtgatg tccttcctac gtcacaacga gcacgaaacg
gtcctgtgcc tggctaatct ctccgatact gagcggacgg ttgcccttca ccttccacaa
180
ttcgcgggcg tggcgggctc ttctctcatc catggtcagg acgcgcaacc agtaaaagct
gacggaacac tgtccgtacc gttgtggcca tatggctatc gatggctgca gatgtccggt
300
```

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gaggagaggt catgaccgct tgggaagac
329
<210> 2016
<211> 104
<212> PRT
<213> Homo sapiens
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Thr Arg Ala Met Leu Gly Ile Arg Arg His His Pro Val Phe Gly Thr
                                                        15
Gly Glu Phe Thr Asp Leu Gly Gly Pro Asp Met Ala Val Met Ser Phe
            20
                                25
Leu Arg His Asn Glu His Glu Thr Val Leu Cys Leu Ala Asn Leu Ser
                            40
        35
Asp Thr Glu Arg Thr Val Ala Leu His Leu Pro Gln Phe Ala Gly Val
                        55
Ala Gly Ser Ser Leu Ile His Gly Gln Asp Ala Gln Pro Val Lys Ala
                    70
Asp Gly Thr Leu Ser Val Pro Leu Trp Pro Tyr Gly Tyr Arg Trp Leu
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Gln Met Ser Gly Glu Glu Arg Ser
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<210> 2017
<211> 457
<212> DNA
<213> Homo sapiens
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ggcgacaagc tactggccat tgacaatatc cgcctggaca actgccccat ggaggacgcc
gtgcaaatcc tgcggcagtg cgaggacctg gtgaagctga agatccggaa ggacgaggac
aactotgatg agotggagao cacaggtgoo gtoagttaca cagtggagot gaagogotao
gggggtcccc tgggcatcac catttcgggc acggaggaac cttttgaccc cattttcatc
tcaggcctcc ccaaacgtgg cctggctgag aggactggtg ccatccagtg ggggaaccgc
ttcggaccat aacaacgtta ttctcaggga cggacca
457
<210> 2018
<211> 143
<212> PRT
<213> Homo sapiens
<400> 2018
Thr Lys Val Arg Phe Met Ala Ser Phe Pro Pro Ala Ala Ser Arg Lys
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Arg Gly Glu Pro Leu Ile Ile Ser Asp Ile Lys Lys Gly Ser Val Ala
His Arg Thr Gly Thr Leu Glu Pro Gly Asp Lys Leu Leu Ala Ile Asp
Asn Ile Arg Leu Asp Asn Cys Pro Met Glu Asp Ala Val Gln Ile Leu
                       55
Arg Gln Cys Glu Asp Leu Val Lys Leu Lys Ile Arg Lys Asp Glu Asp
                                        75
                   70
Asn Ser Asp Glu Leu Glu Thr Thr Gly Ala Val Ser Tyr Thr Val Glu
               85
                                    90
Leu Lys Arg Tyr Gly Gly Pro Leu Gly Ile Thr Ile Ser Gly Thr Glu
            100
                                105
Glu Pro Phe Asp Pro Ile Phe Ile Ser Gly Leu Pro Lys Arg Gly Leu
                           120
       115
Ala Glu Arg Thr Gly Ala Ile Gln Trp Gly Asn Arg Phe Gly Pro
                        135
<210> 2019
<211> 483
<212> DNA
<213> Homo sapiens
<400> 2019
cgcgtcggcg acgattttat cctcggggtt cgttataccg ccgatgaatg tctcgagaac
ggcaccggca aggcggaagg catcgaaatc tccagacggc tgaaggagag cggcctgatc
gactatetea aegteateag gggacatate gacacegate eeggeetgae egaegteate
cccattcagg gcatggcgag cgcgccgcat cttgatttcg caggcgaaat ccgcgcggcg
accagettee cegtetteea tgeegecaaa atteaggatg tegecaeege eeggeatgeg
attgccgccg gcaaggtcga catgatcggc atgacccgcg cccacatgac cgatccgcat
atogtocgca agatoatgga aaaacaggag gaggacatoc goocctgcgt cggcgccaat
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480
ggc
483
<210> 2020
<211> 161
<212> PRT
<213> Homo sapiens
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Arg Val Gly Asp Asp Phe Ile Leu Gly Val Arg Tyr Thr Ala Asp Glu
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Cys Leu Glu Asn Gly Thr Gly Lys Ala Glu Gly Ile Glu Ile Ser Arg
Arg Leu Lys Glu Ser Gly Leu Ile Asp Tyr Leu Asn Val Ile Arg Gly
```

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40
His Ile Asp Thr Asp Pro Gly Leu Thr Asp Val Ile Pro Ile Gln Gly
                                          60
                       55
Met Ala Ser Ala Pro His Leu Asp Phe Ala Gly Glu Ile Arg Ala Ala
                                      75
                   70
Thr Ser Phe Pro Val Phe His Ala Ala Lys Ile Gln Asp Val Ala Thr
               85
                                  90
Ala Arg His Ala Ile Ala Ala Gly Lys Val Asp Met Ile Gly Met Thr
                                                  110
                               105
           100
Arg Ala His Met Thr Asp Pro His Ile Val Arg Lys Ile Met Glu Lys
                                              125
                           120
       115
Gln Glu Glu Asp Ile Arg Pro Cys Val Gly Ala Asn Tyr Cys Leu Asp
                                          140
                       135
Arg Ile Tyr Gln Gly Gly Leu Ala Phe Cys Ile His Asn Ala Ala Thr
                                      155
145
Gly
<210> 2021
<211> 797
<212> DNA
<213> Homo sapiens
<400> 2021
ngaatteggt caetggetta acteggagea cagetteace acgaeceatg acaaggaagg
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gtttctcctg agaagggcca gcaagtgtgt ttaaggacat cctccctcct gtccctgcag
120
coctected teagtacteg egagactacg aaaacaegtg etgaaatgga caccegetee
gggagccagt gttccgtcac cccagaagcc atactcaata atgaaaagct ggtcttgccg
coccgcatct ccagagtgaa cggctggtcg ttacccctgc actacttcca ggtggtgacc
tgggetgtet tegtgggeet tteeteggee acetteggga tetteattee etteetgeet
cacgcgtgga aatacatcgc ctatgtggta tccttttcat cgtggcatgg tctaagcggg
aggggttcct ggaggaccct gcgatggacc tggctgtggg gtctgggcca tggctgcccg
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cogcoctget ggcagcotto ogctaaaato cotgogcago attittgcaca tggccagcoc
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gcgtttccat gccaagc
797
<210> 2022
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<211> 135
<212> PRT
<213> Homo sapiens
<400> 2022
Met Asp Thr Arg Ser Gly Ser Gln Cys Ser Val Thr Pro Glu Ala Ile
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1
                5
Leu Asn Asn Glu Lys Leu Val Leu Pro Pro Arg Ile Ser Arg Val Asn
                                25
                                                    3.0
            20
Gly Trp Ser Leu Pro Leu His Tyr Phe Gln Val Val Thr Trp Ala Val
                            40
        35
Phe Val Gly Leu Ser Ser Ala Thr Phe Gly Ile Phe Ile Pro Phe Leu
Pro His Ala Trp Lys Tyr Ile Ala Tyr Val Val Ser Phe Ser Ser Trp
                    70
                                        75
His Gly Leu Ser Gly Arg Gly Ser Trp Arg Thr Leu Arg Trp Thr Trp
Leu Trp Gly Leu Gly His Gly Cys Pro Val Ala Pro Val Thr Cys Pro
                                                    110
                                105
            100
Gly Pro Asp Tyr Val Pro Arg Ala Cys Arg Trp Ala Gln Trp Pro Leu
       115
                           120
Met Val Leu Ala Ser Pro Gly
    130
<210> 2023
<211> 462
<212> DNA
<213> Homo sapiens
<400> 2023
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cgcaccgcga tccttgaggt gatgaacgag gccatcgatt ctcccgatga aatggccccg
120
actgeteege geateattae egteeacate ceagtggaea agateggtga ggteategge
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Val Ser Glu His 385 Phe Gly Thr	Gln Gly Lys 370 Gly Asn Lys Ala Gln 450	Arg Met 355 Gly Gly Leu Met Leu 435 Ser	Ile 340 Leu Asp Arg Ala Tyr 420 His	325 Arg Glu Val Gly Ala 405 Ser Tyr Leu	Ala Leu Glu Gln Val 390 Asn Glu Phe	Pro Asp Ala 375 Glu Ala Gly Lys Met 455	Asp Leu 360 Gln Gln Ser Lys 440 Ala	Glu 345 Ile Val Asn Asn Asp 425 Ala	330 Val Gln Gly His Ser 410 Ile Ala Leu	Leu Glu Tyr Leu Gln 395 His Val Asp	Asn Tyr Gly 380 Arg Ala Pro Met Gly 460	Pro Gln 365 Gln Ala Met Gln Gly 445 Arg	Gly 350 Phe Leu Phe Ala Ser 430 Asn	335 Met Leu His Asp Phe 415 Asn Pro	Asn Ala Leu Tyr 400 Leu Glu Val
Val Ser Glu His 385 Phe Gly Thr Gly Val	Gln Gly Lys 370 Gly Asn Lys Ala Gln 450	Arg Met 355 Gly Gly Leu Met Leu 435 Ser	Ile 340 Leu Asp Arg Ala Tyr 420 His	325 Arg Glu Val Gly Ala 405 Ser Tyr Leu	Ala Leu Glu Gln Val 390 Asn Glu Phe Gly	Pro Asp Ala 375 Glu Ala Gly Lys Met 455	Asp Leu 360 Gln Gln Ser Lys 440 Ala	Glu 345 Ile Val Asn Asn Asp 425 Ala	330 Val Gln Gly His Ser 410 Ile Ala Leu	Leu Glu Tyr Leu Gln 395 His Val Asp Tyr	Asn Tyr Gly 380 Arg Ala Pro Met Gly 460	Pro Gln 365 Gln Ala Met Gln Gly 445 Arg	Gly 350 Phe Leu Phe Ala Ser 430 Asn	335 Met Leu His Asp Phe 415 Asn Pro	Asn Ala Leu Tyr 400 Leu Glu Val Gln Gln
Val Ser Glu His 305 Phe Gly Thr Gly Val 465	Gln Gly Lys 370 Gly Asn Lys Ala Gln 450 Asn	Arg Met 355 Gly Gly Leu Met Leu 435 Ser Tyr	Ile 340 Leu Asp Arg Ala Tyr 420 His Gly Asp	325 Arg Glu Val Gly Ala 405 Ser Tyr Leu	Ala Leu Glu Gln Val 390 Asn Glu Phe Gly Ala 470	Pro Asp Ala 375 Glu Ala Gly Lys Met 455 Leu	Asp Leu 360 Gln Gly Ser Lys 440 Ala	Glu 345 Ile Val Asn Asn Asp 425 Ala Tyr	330 Val Gln Gly His Ser 410 Ile Ala Leu	Leu Glu Tyr Leu Gln 395 His Val Asp Tyr Gln 475	Asn Tyr Gly 380 Arg Ala Pro Met Gly 460 Lys	Pro Gln 365 Gln Ala Met Gln Gly 445 Arg	Gly 350 Phe Leu Phe Ala Ser 430 Asn Gly	335 Met Leu His Asp Phe 415 Asn Pro Val	Asn Ala Leu Tyr 400 Leu Glu Val Gln Gln 480
Val Ser Glu His 305 Phe Gly Thr Gly Val 465	Gln Gly Lys 370 Gly Asn Lys Ala Gln 450 Asn	Arg Met 355 Gly Gly Leu Met Leu 435 Ser Tyr	Ile 340 Leu Asp Arg Ala Tyr 420 His	325 Arg Glu Val Gly Ala 405 Ser Tyr Leu Leu Gly	Ala Leu Glu Gln Val 390 Asn Glu Phe Gly Ala 470	Pro Asp Ala 375 Glu Ala Gly Lys Met 455 Leu	Asp Leu 360 Gln Gly Ser Lys 440 Ala	Glu 345 Ile Val Asn Asn Asp 425 Ala Tyr	330 Val Gln Gly His Ser 410 Ile Ala Leu Phe	Leu Glu Tyr Leu Gln 395 His Val Asp Tyr Gln 475	Asn Tyr Gly 380 Arg Ala Pro Met Gly 460 Lys	Pro Gln 365 Gln Ala Met Gln Gly 445 Arg	Gly 350 Phe Leu Phe Ala Ser 430 Asn Gly	335 Met Leu His Asp Phe 415 Asn Pro Val Glu Asn	Asn Ala Leu Tyr 400 Leu Glu Val Gln Gln 480
Val Ser Glu His 385 Phe Gly Thr Gly Val 465 Gly	Gln Gly Lys 370 Gly Asn Lys Ala Gln 450 Asn	Arg Met 355 Gly Gly Leu Met Leu 435 Ser Tyr	Ile 340 Leu Asp Arg Ala Tyr 420 His Gly Asp	325 Arg Glu Val Gly Ala 405 Ser Tyr Leu Leu Gly 485	Ala Leu Glu Gln Val 390 Asn Glu Phe Gly Ala 470 Gln	Pro Asp Ala 375 Glu Ala Gly Lys Met 455 Leu Leu	Asp Leu 360 Gln Gly Ser Lys 440 Ala Lys Gln	Glu 345 Ile Val Asn Asp 425 Ala Tyr	330 Val Gln Gly His Ser 410 Ile Ala Leu Phe Gly 490	Leu Glu Tyr Leu Gln 395 His Val Asp Tyr Gln 475 Ser	Asn Tyr Gly 380 Arg Ala Pro Met Gly 460 Lys	Pro Gln 365 Gln Ala Met Gln Gly 445 Arg Ala	Gly 350 Phe Leu Phe Ala Ser 430 Asn Gly Ala	335 Met Leu His Asp Phe 415 Asn Pro Val Glu Asn 495	Asn Ala Leu Tyr 400 Leu Glu Val Gln 480 Gly
Val Ser Glu His 385 Phe Gly Thr Gly Val 465 Gly	Gln Gly Lys 370 Gly Asn Lys Ala Gln 450 Asn	Arg Met 355 Gly Gly Leu Met Leu 435 Ser Tyr	Ile 340 Leu Asp Arg Ala Tyr 420 His Gly Asp Asp Lys	325 Arg Glu Val Gly Ala 405 Ser Tyr Leu Leu Gly 485	Ala Leu Glu Gln Val 390 Asn Glu Phe Gly Ala 470 Gln	Pro Asp Ala 375 Glu Ala Gly Lys Met 455 Leu Leu	Asp Leu 360 Gln Gly Ser Lys 440 Ala Lys Gln	Glu 345 Ile Val Asn Asp 425 Ala Tyr Tyr Leu Gln	330 Val Gln Gly His Ser 410 Ile Ala Leu Phe Gly 490	Leu Glu Tyr Leu Gln 395 His Val Asp Tyr Gln 475 Ser	Asn Tyr Gly 380 Arg Ala Pro Met Gly 460 Lys	Pro Gln 365 Gln Ala Met Gln Gly 445 Arg Ala	Gly 350 Phe Leu Phe Ala Ser 430 Asn Gly Ala Tyr	335 Met Leu His Asp Phe 415 Asn Pro Val Glu Asn 495	Asn Ala Leu Tyr 400 Leu Glu Val Gln 480 Gly
Val Ser Glu His 385 Phe Gly Thr Gly Val 465 Gly Ile	Gln Gly Lys 370 Gly Asn Lys Ala Gln 450 Asn Trp Gly	Arg Met 355 Gly Gly Leu Met Leu 435 Ser Tyr Val	Ile 340 Leu Asp Arg Ala Tyr 420 His Gly Asp	325 Arg Glu Val Gly Ala 405 Ser Tyr Leu Leu Gly 485 Arg	Ala Leu Glu Gln Val J90 Asn Glu Phe Gly Ala 470 Gln Asp	Pro Asp Ala 375 Glu Ala Gly Lys Met 455 Leu Leu Tyr	Asp Leu 360 Gln Gly Ser Lys 440 Ala Lys Gln Lys	Glu 345 Ile Val Asn Asn Asp 425 Ala Tyr Leu Gln 505	330 Val Gln Gly His Ser 410 Ile Ala Leu Phe Gly 490 Ala	Leu Glu Tyr Leu Gln 395 His Val Asp Tyr Gln 475 Ser	Asn Tyr Gly 380 Arg Ala Pro Met Gly 460 Lys	Pro Gln 365 Gln Ala Met Gln Gly 445 Arg Ala Tyr	Gly 350 Phe Leu Phe Ala Ser 430 Asn Gly Ala Tyr Phe 510	335 Met Leu His Asp Phe 415 Asn Pro Val Glu Asn 495 Asn	Asn Ala Leu Tyr 400 Leu Glu Val Gln 480 Gly Leu

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520
His Ala Ser Gly Thr Gly Val Met Arg Ser Cys His Thr Ala Val Glu
                                        540
                      535
Leu Phe Lys Asn Val Cys Glu Arg Gly Arg Trp Ser Glu Arg Leu Met
                                    555
                  550
Thr Ala Tyr Asn Ser Tyr Lys Asp Gly Asp Tyr Asn Ala Ala Val Ile
                                 570
              565
Gln Tyr Leu Leu Leu Ala Glu Gln Gly Tyr Glu Val Ala Gln Ser Asn
           580
                             585
Ala Ala Phe Ile Leu Asp Gln Arg Glu Ala Ser Ile Val Gly Glu Asn
                                          605
                          600
Glu Thr Tyr Pro Arg Ala Leu Leu His Trp Asn Arg Ala Ala Ser Gln
                     615
                                        620
Gly Tyr Thr Val Ala Arg Ile Lys Leu Gly Asp Tyr His Phe Tyr Gly
                  630
                                      635
Phe Gly Thr Asp Val Asp Tyr Glu Thr Ala Phe Ile His Tyr Arg Leu
                                 650
              645
Ala Ser Glu Gln Gln His Ser Ala Gln Ala Met Phe Asn Leu Gly Tyr
                              665
Met His Glu Lys Gly Leu Gly Ile Lys Gln Asp Ile His Leu Ala Lys
                         680
Arg Phe Tyr Asp Met Ala Ala Glu Ala Ser Pro Asp Ala Gln Val Pro
                                        700
                   695
Val Phe Leu Ala Leu Cys Lys Leu Gly Val Val Tyr Phe Leu Gln Tyr
                   710
                                      715
Ile Arg Glu Thr Asn Ile Arg Asp Met Phe Thr Gln Leu Asp Met Asp
               725
                                 730
Gln Leu Leu Gly Pro Glu Trp Asp Leu Tyr Leu Met Thr Ile Ile Ala
                              745
Leu Leu Leu Gly Thr Val Ile Ala Tyr Arg Gln Arg Gln His Gln Asp
                                             765
                         760
Met Pro Ala Pro Arg Pro Pro Gly Pro Arg Pro Ala Pro Pro Gln Gln
                      775
                                         780
Glu Gly Pro Pro Glu Gln Gln Pro Pro Gln
                  790
785
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<212> DNA
<213> Homo sapiens
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aaccccqtqc cqcacctqqa cacqcatctq ctcqqcggct ggatgaaacc tgccqaacaq
cgcagcgcga tcgaacaggc ttccctggac cgctccaatc aattgaccga cgaattgctc
geogeogacy tgotggtgat ggotgcaccy atgtacaact tegetatece cagcaccete
aaagcctggc tggaccacgt gttgcgtgcc ggtgtgacct tcaagtacac cgccaccggc
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ccccagggat tgctgcacgg caagcgcgcg attgtgctga ccgctcgcgg cggcattcat
accggcgcca gctccgatca ccaggaaccg tacctgcgcc aggtcatggc ctttatcggg
attcatgacg tcacgttcat tcatgccgaa ggggtgaact tgagcggtga cttccaggaa
aaaggcctta accacgccaa ggcgttgctg gcgcaacttg tggcatgaac cgagtcaacg
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662
<210> 2032
<211> 195
<212> PRT
<213> Homo sapiens
<400> 2032
Ile Ile Glu Ser Ser Ala Arg Gln Gln Asp Ser Ile Ser Arg Gln Leu
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                               10
Thr Gln Gln Phe Ile Ser Gln Trp Gln Ala Ala His Pro Ala Asp Gln
           20
                               25
Ile Thr Val Arg Asp Val Ala Leu Asn Pro Val Pro His Leu Asp Thr
                           40
                                              45
His Leu Leu Gly Gly Trp Met Lys Pro Ala Glu Gln Arg Ser Ala Ile
                       55
Glu Gln Ala Ser Leu Asp Arg Ser Asn Gln Leu Thr Asp Glu Leu Leu
                   70
                                      75
Ala Ala Asp Val Leu Val Met Ala Ala Pro Met Tyr Asn Phe Ala Ile
                                   90
               85
Pro Ser Thr Leu Lys Ala Trp Leu Asp His Val Leu Arg Ala Gly Val
                                                  110
                              105
           100
Thr Phe Lys Tyr Thr Ala Thr Gly Pro Gln Gly Leu Leu His Gly Lys
                                              125
                          120
      115
Arg Ala Ile Val Leu Thr Ala Arg Gly Gly Ile His Thr Gly Ala Ser
                                          140
                     135
Ser Asp His Gln Glu Pro Tyr Leu Arg Gln Val Met Ala Phe Ile Gly
                   150
                                      155
Ile His Asp Val Thr Phe Ile His Ala Glu Gly Val Asn Leu Ser Gly
                                  170
              165
Asp Phe Gln Glu Lys Gly Leu Asn His Ala Lys Ala Leu Leu Ala Gln
                               185
Leu Val Ala
       195
<210> 2033
<211> 380
<212> DNA
<213> Homo sapiens
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aaattttaaa acggtcatca tttaacaggc gaagctgtaa aacgcagtct tgaagaggga
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atgaaaaaaa gtgatttgtt aaaaggatca cttcctatca aatcaatcaa cgctcatgga
120
caaaaaqtca caatcaatac taaagaacct tatccagaat taaagtctga actcgcaagc
ccatttgctg ctatatacga cacaaaagct aaaaacaaag taactgatca acctgttggt
240
acgggtcctt atcaaattga cagttataaa cgttcgcaaa aaatcgtatt aaaacaattc
300
aaagactact ggcaaggtac gccaaaatta aaaagaatta atgtcactta tcatgaagat
ggtaatantc gtgttgatca
380
<210> 2034
<211> 106
<212> PRT
<213> Homo sapiens
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Met Lys Lys Ser Asp Leu Leu Lys Gly Ser Leu Pro Ile Lys Ser Ile
                                  10
Asn Ala His Gly Gln Lys Val Thr Ile Asn Thr Lys Glu Pro Tyr Pro
           20
                               25
Glu Leu Lys Ser Glu Leu Ala Ser Pro Phe Ala Ala Ile Tyr Asp Thr
       35
                           40
Lys Ala Lys Asn Lys Val Thr Asp Gln Pro Val Gly Thr Gly Pro Tyr
   50
                       55
                                          60
Gln Ile Asp Ser Tyr Lys Arg Ser Gln Lys Ile Val Leu Lys Gln Phe
                   70
                                      75
Lys Asp Tyr Trp Gln Gly Thr Pro Lys Leu Lys Arg Ile Asn Val Thr
               85
Tyr His Glu Asp Gly Asn Xaa Arg Val Asp
           100
                               105
<210> 2035
<211> 495
<212> DNA
<213> Homo sapiens
<400> 2035
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tatgetntaa tgtteecett teatetegea tgteteeact tetgetgeta ttgetgttae
ttgtgtgttg gtgcacctaa tggtgtccca tatttctctg atgctgtgtt catttttctt
gattettet actgretggt etteagting cataateeat attgreetet chactagite
actggtgctt ttgcctgcca gctctaattt actgttatcc cctttagtga aattttttct
ttttttctct tctcattcca gttattatac agaactattc aacttcaaga tttgtggggt
```

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tttgttttgt tttgttttga gaccccatct caaaaaaaaa aaaaaccagc tttctcctca
acttggggga acctt
495
<210> 2036
<211> 98
<212> PRT
<213> Homo sapiens
<400> 2036
Xaa Ile Pro Leu Leu Leu Ala Thr Gln Ala Gln Ala Thr Arg Ser His
                                    10
Asp Thr Ser Cys Leu His Phe Phe His Val Cys Met Tyr Val Cys Met
           20
Tyr Val Cys Met Tyr Val Cys Met Tyr Ala Xaa Met Phe Pro Phe His
Leu Ala Cys Leu His Phe Cys Cys Tyr Cys Cys Tyr Leu Cys Val Gly
                        55
Ala Pro Asn Gly Val Pro Tyr Phe Ser Asp Ala Val Phe Ile Phe Leu
                                        75
                    70
Asp Ser Phe Tyr Cys Leu Val Phe Ser Leu His Asn Pro Tyr Cys Ser
                85
                                    90
                                                        95
Leu Tyr
<210> 2037
<211> 327
<212> DNA
<213> Homo sapiens
<400> 2037
acgcgtgaag ggaaggggga gaccccggca gaaatggaga aatgggggcg cacacagacg
ggaagagtga ggttggagtg cettteeege geteatette egteeceaet ecaegeceag
120
caaatccaaa caccgcggcc totggtggcc cgggcttcca tttcccctgg aggggcaagg
gcgtttcctc ttccgcccaa ccggggcgct gagcggcggg aacagcggcg ggggctttgt
240
ggtcccgggg ggtccgagtg tgtgtcaggg gctggggcgg gggatgggcg cggcccctgg
gtatccctca cggtcctggt tcatgag
327
<210> 2038
<211> 98
<212> PRT
<213> Homo sapiens
<400> 2038
Met Glu Lys Trp Gly Arg Thr Gln Thr Gly Arg Val Arg Leu Glu Cys
                5
                                    10
Leu Ser Arg Ala His Leu Pro Ser Pro Leu His Ala Gln Gln Ile Gln
```

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25
Thr Pro Arg Pro Leu Val Ala Arg Ala Ser Ile Ser Pro Gly Gly Ala
Arg Ala Phe Pro Leu Pro Pro Asn Arg Gly Ala Glu Arg Arg Glu Gln
                       55
Arg Arg Gly Leu Cys Gly Pro Gly Gly Ser Glu Cys Val Ser Gly Ala
Gly Ala Gly Asp Gly Arg Gly Pro Trp Val Ser Leu Thr Val Leu Val
                                    90
               85
His Glu
<210> 2039
<211> 307
<212> DNA
<213> Homo sapiens
<400> 2039
accggtgatc cactetgcga aagcggccgc gagcgaagcg ttettggtet tettcgagat
cgcgatgtat tgcccggaaa acagcggctt gatgccgtca ttgagaggct ctgggccaac
accggtacgg gcatatgcct gggcggcatt cttttggatg ttgcgaagaa aggacgcatt
cggcgtgccg aaagccaggg atccttcacc gtagaccttg gaccgatgga ggcccccggc
aatcgagtcc ttcgaaattc ccccttggca tacatgtcgg ccatcgtcgt cagccagagt
aacgcgt
307
<210> 2040
<211> 94
<212> PRT
<213> Homo sapiens
<400> 2040
Met Ala Asp Met Tyr Ala Lys Gly Glu Phe Arg Arg Thr Arg Leu Pro
                                   10
Gly Ala Ser Ile Gly Pro Arg Ser Thr Val Lys Asp Pro Trp Leu Ser
                                25
                                                   30
           20
Ala Arg Arg Met Arg Pro Phe Phe Ala Thr Ser Lys Arg Met Pro Pro
                           40
Arg His Met Pro Val Pro Val Leu Ala Gln Ser Leu Ser Met Thr Ala
                       55
                                            60
Ser Ser Arg Cys Phe Pro Gly Asn Thr Ser Arg Ser Arg Arg Pro
                   70
                                       75
Arg Thr Leu Arg Ser Arg Pro Leu Ser Gln Ser Gly Ser Pro
                                    90
<210> 2041
<211> 348
<212> DNA
<213> Homo sapiens
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<400> 2041
nnccggcgat gcagggattc gcccgcgatg cgctcgaacc cggcgcgggg ggcgttcctc
gecagettee tgeegttege cagaegeate geegaggegg gggtgegeaa ttegetegee
120
cagetygteg ccaagetgae cetgeeegge atgeeegaea tetaccaggg etgegagatg
tgggacetca geetggtega eegggacaat egeegeeeg tegaetaega gacaegegae
240
geggeeetgg ceggetgggt egegaeeeeg eeggaggaae gegeegegge getgegeaee
300
ctgctgacgg attggcgcag cggcgcggtc aagctggccg tgacgcgt
348
<210> 2042
<211> 116
<212> PRT
<213> Homo sapiens
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Xaa Arg Arg Cys Arg Asp Ser Pro Ala Met Arg Ser Asn Pro Ala Arg
                                   10
Gly Ala Phe Leu Ala Ser Phe Leu Pro Phe Ala Arg Arg Ile Ala Glu
                                                    30
                                25
            20
Ala Gly Val Arg Asn Ser Leu Ala Gln Leu Val Ala Lys Leu Thr Leu
                                                45
        35
                            40
Pro Gly Met Pro Asp Ile Tyr Gln Gly Cys Glu Met Trp Asp Leu Ser
                        55
                                            60
    50
Leu Val Asp Arg Asp Asn Arg Arg Pro Val Asp Tyr Glu Thr Arg Asp
                                        75
                    70
65
Ala Ala Leu Ala Gly Trp Val Ala Thr Pro Pro Glu Glu Arg Ala Ala
                                    90
                85
Ala Leu Arg Thr Leu Leu Thr Asp Trp Arg Ser Gly Ala Val Lys Leu
                                105
            100
Ala Val Thr Arg
        115
<210> 2043
<211> 712
<212> DNA
<213> Homo sapiens
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gatetgaegg tetegaetaa geetgaeeat teegaggtea eegaegeega eettgeegte
gaagattegg tgegeagage cetgtetega atgegeteee gggatgeegt ceaeggegag
gaacgtgccg ataccgggga tggaccccgc cggtggatca ttgatccgat cgacggcact
gcgaattttc tgcgtggggt cccagtgtgg gccaccctca ttgccctcag cgtcgaggac
cagattgtcg catctgtggt ctctgctcct gccctcaagc gacgctggtg ggcagcccgt
300
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ggctcaggag catggtcggg caaatccctg gcctcagcga caccgatcca cgtctcgaat
grgcgcaatc trgccgacgc atterratec tacterrage regarding ggrcgagage
ggacgagggc acgggttcgg tgaactcatg cggtcggtgt ggcggacccg agccttcggc
gatttctggt cttacatgat ggtggcagaa ggtgtcgtcg atgtggcatg cgagccggaa
ctcagcctgc acgacatggc cgccctcgac gctatcgtca ccgaggcggg cggtaagttc
accygtctcg atggcaaaga cggcccgtgg tctgggaatg ctctggcgtc gaatggtttc
cttcatgacc aggccctagc catggtccag cctcaggagt gagcaccgat cg
712
<210> 2044
<211> 233
<212> PRT
<213> Homo sapiens
<400> 2044
Asp Leu Thr Val Ser Thr Lys Pro Asp His Ser Glu Val Thr Asp Ala
                                 10
Asp Leu Ala Val Glu Asp Ser Val Arg Arg Ala Leu Ser Arg Met Arg
                                                   30
                               25
           20
Ser Arg Asp Ala Val His Gly Glu Glu Arg Ala Asp Thr Gly Asp Gly
       35
                           40
Pro Arg Arg Trp Ile Ile Asp Pro Ile Asp Gly Thr Ala Asn Phe Leu
                       55
                                           60
Arg Gly Val Pro Val Trp Ala Thr Leu Ile Ala Leu Ser Val Glu Asp
                                       75
                   70
Gln Ile Val Ala Ser Val Val Ser Ala Pro Ala Leu Lys Arg Arg Trp
                                                       95
               85
                                   90
Trp Ala Ala Arg Gly Ser Gly Ala Trp Ser Gly Lys Ser Leu Ala Ser
                              105
           100
Ala Thr Pro Ile His Val Ser Asn Val Arg Asn Leu Ala Asp Ala Phe
       115
                           120
                                              125
Leu Ser Tyr Ser Ser Leu His Gly Trp Val Glu Ser Gly Arg Gly His
                                           140
                      135
   130
Gly Phe Gly Glu Leu Met Arg Ser Val Trp Arg Thr Arg Ala Phe Gly
                                       155
                   150
Asp Phe Trp Ser Tyr Met Met Val Ala Glu Gly Val Val Asp Val Ala
                                                       175 .
                                   170
               165
Cys Glu Pro Glu Leu Ser Leu His Asp Met Ala Ala Leu Asp Ala Ile
                                                   190
           180
                              185
Val Thr Glu Ala Gly Gly Lys Phe Thr Gly Leu Asp Gly Lys Asp Gly
                                               205
                           200
       195
Pro Trp Ser Gly Asn Ala Leu Ala Ser Asn Gly Phe Leu His Asp Gln
                                          220
                      215
Ala Leu Ala Met Val Gln Pro Gln Glu
                   230
<210> 2045
<211> 406
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<212> DNA
<213> Homo sapiens
<400> 2045
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atgcgccgga tgggcgacgg tgatggaccg ggcgctggac ctgggcggtc gcttcgacga
cantacagge tttggccgag gcgggttgga agaaaccggt caaccggtgg tttggccccg
catcaatgcc cagaaccaga agcettgcgc attcgtccca ggccgttcaa ggccgatggc
gagategteg egatgaetgg egaeggtgte aaegaegeee eetegeteaa ggeggeeeat
300
ateggtgteg ccatggacaa acgeggeace gacgtegege gegaggette egecatggte
ctgctcgagg atgattttgg atcgatcgtg cagtcggtcc ggctcg
406
<210> 2046
<211> 135
<212> PRT
<213> Homo sapiens
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Xaa Trp Thr Pro Ala Thr Met Pro Pro Pro His Gly Ser Ile Ala Asp
                                    10
1
Pro Gly Gln Gly Met Arg Arg Met Gly Asp Gly Asp Gly Pro Gly Ala
                                25
            20
Gly Pro Gly Arg Ser Leu Arg Arg Xaa Tyr Arg Leu Trp Pro Arg Arg
                                                45
                            40
Val Gly Arg Asn Arg Ser Thr Gly Gly Leu Ala Pro His Gln Cys Pro
                        55
                                            60
Glu Pro Glu Ala Leu Arg Ile Arg Pro Arg Pro Phe Lys Ala Asp Gly
                                        75
                    70
Glu Ile Val Ala Met Thr Gly Asp Gly Val Asn Asp Ala Pro Ser Leu
               85
                                    90
Lys Ala Ala His Ile Gly Val Ala Met Asp Lys Arg Gly Thr Asp Val
                                105
                                                     110
            100
Ala Arg Glu Ala Ser Ala Met Val Leu Leu Glu Asp Asp Phe Gly Ser
                                                125
        115
Ile Val Gln Ser Val Arg Leu
    130
                        135
<210> 2047
<211> 796
<212> DNA
<213> Homo sapiens
<400> 2047
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tgaggaattt gagaagaaga ttccaagtgt ggaagacagc cttggagagg gcagcaggga
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tgctggccgg ccaggagaga gaggatccgg gggcttgttc agtcctagca ctgcccacgt
gccggatggg gcactcgggc agagagacca gagcagctgg caaaacagtg atgctagcca
ggaggtggga gggcatcagg agagacagca ggcaggggct cagggccctg gcagtgctga
300
cctggaagat ggggagatgg gaaagcgagg ctgggtcggt gagtttagcc tcagtgttgg
cccccagcga gaggcagcat ttagcccagg gcagcaggac tggagccggg acttctgcat
cgaggccagt gagaggagct atcagtttgg catcattggc aacgacagag tgagtggtgc
480
tggctttagc ccttctagca agatggaagg tggtcacttt gtgcctcctg ggaagaccac
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aggtggcctg agcttgagag acatgaacct gaccggctgt ttggaaagtg gagggtctga
780
caaagatttg gctgag
796
<210> 2048
<211> 160
<212> PRT
<213> Homo sapiens
<400> 2048
Met Gly Lys Arg Gly Trp Val Gly Glu Phe Ser Leu Ser Val Gly Pro
1
Gln Arg Glu Ala Ala Phe Ser Pro Gly Gln Gln Asp Trp Ser Arg Asp
                                                  30
                               25
Phe Cys Ile Glu Ala Ser Glu Arg Ser Tyr Gln Phe Gly Ile Ile Gly
                           40
                                              45
       35
Asn Asp Arg Val Ser Gly Ala Gly Phe Ser Pro Ser Ser Lys Met Glu
                                           60
                       55
   50
Gly Gly His Phe Val Pro Pro Gly Lys Thr Thr Ala Gly Ser Val Asp
                                       75
65
Trp Thr Asp Gln Leu Gly Leu Arg Asn Leu Glu Val Ser Ser Cys Val
                                   90
               85
Gly Ser Gly Gly Ser Ser Glu Ala Arg Glu Ser Ala Val Gly Gln Met
                               105
                                                  110
           100
Gly Trp Ser Gly Gly Leu Ser Leu Arg Asp Met Asn Leu Thr Gly Cys
                           120
       115
Leu Glu Ser Gly Gly Ser Glu Glu Pro Gly Gly Ile Gly Ile Gly Glu
                       135
                                          140
Lys Asp Trp Thr Ser Asp Val Asn Val Lys Ser Lys Asp Leu Ala Glu
                                       155
                   150
<210> 2049
<211> 516
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<212> DNA
<213> Homo sapiens
<400> 2049
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gccaacgctc ccccgccaat cgccctgggc ctgttagtag tcgccattag cggcccttca
geetacggtg ccgcctgtgc ggtgatgttg gtcagttggg ctccgctggc cgcccattgt
gettegttgt tggeggaage eegeacgeag eestatatee geatgttgee ggtattggge
300
gteggeegat ggegeaeget gacccactac etgetgeegg egetetetge teecetgetg
cgccacgcca tgttgcgtct gccgggcatt gcgctggcgc tggcggcctt gggttttttt
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tatctcgaac gggcgccctg gggagtcctg gcaccg
516
<210> 2050
<211> 172
<212> PRT
<213> Homo sapiens
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Arg Val Ala Tyr Gly Ala Leu Asn Thr Ser Leu Leu Ala Leu Ala Val
1
                5
                          10
Ser Phe Ala Ser Leu Phe Leu Gly Ile Val Phe Gly Leu Met Pro Arg
                               25
                                                   30
           20
Leu Met Cys Gly Val Ile Glu Leu Ala Asn Ala Pro Pro Pro Ile Ala
       35
                           40
Leu Gly Leu Leu Val Val Ala Ile Ser Gly Pro Ser Ala Tyr Gly Ala
                                           60
Ala Cys Ala Val Met Leu Val Ser Trp Ala Pro Leu Ala Ala His Cys
                                       75
                  70
Ala Ser Leu Leu Ala Glu Ala Arg Thr Gln Pro Tyr Ile Arg Met Leu
                                                       95
               85
                                   90
Pro Val Leu Gly Val Gly Arg Trp Arg Thr Leu Thr His Tyr Leu Leu
                               105
                                                   110
           100
Pro Ala Leu Ser Ala Pro Leu Leu Arg His Ala Met Leu Arg Leu Pro
                                               125
                           120
Gly Ile Ala Leu Ala Leu Ala Ala Leu Gly Phe Phe Gly Leu Gly Pro
                       135
                                           140
   130
Gln Pro Pro Ser Ala Glu Trp Gly Leu Val Leu Ala Glu Gly Met Pro
                                      155
                   150
Tyr Leu Glu Arg Ala Pro Trp Gly Val Leu Ala Pro
               165
<210> 2051
<211> 411
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<212> DNA
<213> Homo sapiens
<400> 2051
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aatagtgatc gtctcggtaa gaatttatgg accgacggtg aaatggggga gccagtaggt
atttatqcaq catttaatqa attagatgag gcaaaatttg tggcgtctca aatccaaaat
tgggtagatg atggtgggga attagatgat tgtgctgttt tatatcgtag taatagccaa
240
tetegtgtta ttgaagaage ettgattegt tgecaaatte ettategaat ttatggeggg
atgcgattct tcgaacgcca agaaattaaa gatgcgttgg catatttacg tttaattaat
aatcgtcaag atgatgccgc atttgagcgt gtgattaata cgcctacgcg t
411
<210> 2052
<211> 137
<212> PRT
<213> Homo sapiens
<400> 2052
Glu Gln Asn Tyr Arg Ser Thr Gly Asn Ile Leu Lys Ser Ala Asn Gln
                                   10
Leu Ile Ser Asn Asn Ser Asp Arg Leu Gly Lys Asn Leu Trp Thr Asp
            20
                                25
                                                    30
Gly Glu Met Gly Glu Pro Val Gly Ile Tyr Ala Ala Phe Asn Glu Leu
                                                45
       35
                            40
Asp Glu Ala Lys Phe Val Ala Ser Gln Ile Gln Asn Trp Val Asp Asp
   50
                        55
                                            60
Gly Glu Leu Asp Asp Cys Ala Val Leu Tyr Arg Ser Asn Ser Gln
65
Ser Arg Val Ile Glu Glu Ala Leu Ile Arg Cys Gln Ile Pro Tyr Arg
                85
                                    90
Ile Tyr Gly Gly Met Arg Phe Phe Glu Arg Gln Glu Ile Lys Asp Ala
                                105
                                                    110
           100
Leu Ala Tyr Leu Arg Leu Ile Asn Asn Arg Gln Asp Asp Ala Ala Phe
                                                125
       115
                           120
Glu Arg Val Ile Asn Thr Pro Thr Arg
   130
                       135
<210> 2053
<211> 287
<212> DNA
<213> Homo sapiens
<400> 2053
nccatggaag cottcaatot tgtaagagaa agtgaacago tgttttccat atgccaaato
ccgctcctct gctggatcct gtgtaccagt ctgaagcaag agatgcagaa aggaaaagac
120
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ctggccctga cctgccagag cactacctct gtgtactcct ctttcgtctt taacctgttc
acacetgagg gtgeegaggg eeegacteeg caaacecage accagetgaa ggeeetgtge
tccctggctg cagagggtat gtggacagac acatttgagt tttgtga
<210> 2054
<211> 79
<212> PRT
<213> Homo sapiens
<400> 2054
Ile Cys Gln Ile Pro Leu Leu Cys Trp Ile Leu Cys Thr Ser Leu Lys
                                    10
1
Gln Glu Met Gln Lys Gly Lys Asp Leu Ala Leu Thr Cys Gln Ser Thr
                                25
Thr Ser Val Tyr Ser Ser Phe Val Phe Asn Leu Phe Thr Pro Glu Gly
                            40
        35
Ala Glu Gly Pro Thr Pro Gln Thr Gln His Gln Leu Lys Ala Leu Cys
Ser Leu Ala Ala Glu Gly Met Trp Thr Asp Thr Phe Glu Phe Cys
<210> 2055
<211> 298
<212> DNA
<213> Homo sapiens
<400> 2055
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teccacacca ceatggaaaa tggtettgge attetggget ggggegtegg tggtattgaa
geogaggetg ctatgettgg ecageceate tecatgetta tecceegtgt tgttggettt
aaacttactg gccaaacaca gccgggtgtc accgctacag atgttgttct taccattact
gatatgette gecageatgg tgtgggtgga aaattegggg aattetatgg gggaageg
298
<210> 2056
<211> 99
<212> PRT
<213> Homo sapiens
<400> 2056
Xaa Arg Val Val Met Asn Asn Asp Gly Val Leu Tyr Pro Asp Thr Cys
Val Gly Thr Asp Ser His Thr Thr Met Glu Asn Gly Leu Gly Ile Leu
                                25
Gly Trp Gly Val Gly Gly Ile Glu Ala Glu Ala Ala Met Leu Gly Gln
                                                45
Pro Ile Ser Met Leu Ile Pro Arg Val Val Gly Phe Lys Leu Thr Gly
```

```
55
                                            60
Gln Thr Gln Pro Gly Val Thr Ala Thr Asp Val Val Leu Thr Ile Thr
                                        75
                   70
Asp Met Leu Arg Gln His Gly Val Gly Gly Lys Phe Gly Glu Phe Tyr
                                    90
Gly Gly Ser
<210> 2057
<211> 569
<212> DNA
<213> Homo sapiens
<400> 2057
acgcqtcccq acagtaccga ctataacgga ggaaactatc aggaacggta taaaatttta
gcagaaattc gtaaggctct tgaagacgga gatcgccaaa aagccaaacg attagctgaa
caaaatctag ttggaccaaa caacgcccag tatggtcgtt atctagcctt tggtgatatc
ttcatggtct tcaataacca gaaaaagggg ctggatacag ttacagacta tcaccgtggt
ttggatatca cagaagccac tactacaact tettacaccc aagatggaac gacctttaaa
300
agagaaacct teteaagtta eeetgatgat gttaetgtta eteaettgae eeaaaaaggg
gacaaaaaac ttgattttac agtttggaat agcttaacag aagatttact tgctaacgga
420
gactactcag cggaatattc taactacaag agtggccatg ttacgacaga cccaaatggt
480
atcctactaa aaggtacagt caaagataat ggcctccagt tcgcatccta tctaggaatt
aaaacggacg gaaaagttac tgttcatga
569
<210> 205B
<211> 128
<212> PRT
<213> Homo sapiens
<400> 2058
Met Val Phe Asn Asn Gln Lys Lys Gly Leu Asp Thr Val Thr Asp Tyr
                                    10
His Arg Gly Leu Asp Ile Thr Glu Ala Thr Thr Thr Thr Ser Tyr Thr
           20
                                25
Gln Asp Gly Thr Thr Phe Lys Arg Glu Thr Phe Ser Ser Tyr Pro Asp
Asp Val Thr Val Thr His Leu Thr Gln Lys Gly Asp Lys Lys Leu Asp
                        55
Phe Thr Val Trp Asn Ser Leu Thr Glu Asp Leu Leu Ala Asn Gly Asp
                   70
                                        75
Tyr Ser Ala Glu Tyr Ser Asn Tyr Lys Ser Gly His Val Thr Thr Asp
                                    90
                85
Pro Asn Gly Ile Leu Leu Lys Gly Thr Val Lys Asp Asn Gly Leu Gln
```

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105
            100
Phe Ala Ser Tyr Leu Gly Ile Lys Thr Asp Gly Lys Val Thr Val His
        115
<210> 2059
<211> 644
<212> DNA
<213> Homo sapiens
<400> 2059
gaattegtge caeegtgeea ataettegee aegeaacaga gtgeegteag eggattggge
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agcaatcgac ctgtaggact cagccatgat cgactgggca tcctcgtata gtcgcgatgc
cgcaaccgcc tgcgcttcca agcctgcage gacgtaagag gccctctcac acactgaacc
gategeteca gacaacgtgg aagegataac etegegtege ttetgetgat tetgggecaa
gctcgacaag aagaaccgca gaggggcgac ggcctggtca gggagcgcac cttcagcgtt
300
cgtcttggtc tccgggacag caaaaagcgg ggaatcagcc aggccacgct ccgtcatgag
360
teggeegagg teegeeggta ceteteteat ggetteeaca ggaacgeggt cacacaceae
cgcgatcgac gcgtgcctct cttgagcctc gttgaggaaa tcccacggca cagcgtcagc
480
gtageggget getgaggtga caaagateea eagateegeg geetggagea aetgageege
540
cagatcacga ttgcgggtca ccacagagtc gatgtccggg gcatcgagga tggccaaacc
600
tegeggaate ettgacteeg egacgagetg caaactegac gegt
644
<210> 2060
<211> 130
<212> PRT
<213> Homo sapiens
<400> 2060
Met Arg Glu Val Pro Ala Asp Leu Gly Arg Leu Met Thr Glu Arg Gly
                                    10
1
                5
Leu Ala Asp Ser Pro Leu Phe Ala Val Pro Glu Thr Lys Thr Asn Ala
           20
                                25
                                                    30
Glu Gly Ala Leu Pro Asp Gln Ala Val Ala Pro Leu Arg Phe Phe Leu
                                                45
       35
                            40
Ser Ser Leu Ala Gln Asn Gln Gln Lys Arg Arg Glu Val Ile Ala Ser
                                            60
                        55
Thr Leu Ser Gly Ala Ile Gly Ser Val Cys Glu Arg Ala Ser Tyr Val
                    70
Ala Ala Gly Leu Glu Ala Gln Ala Val Ala Ala Ser Arg Leu Tyr Glu
Asp Ala Gln Ser Ile Met Ala Glu Ser Tyr Arg Ser Ile Ala Ala Gln
                                105
Ser Ala Asp Gly Thr Leu Leu Arg Gly Glu Val Leu Ala Arg Trp His
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125
                            120
       115
Glu Phe
    130
<210> 2061
<211> 481
<212> DNA
<213> Homo sapiens
<400> 2061
gttaacctgg taaggagagc gacacaggaa ggtgcagggg ttgccatggt gtggccccag
atgctgtgat tacgcgccag ccccgtcaca ccgtacgggt ggtaggactg ggcaaagaag
acgccgccac ctggatgcac tgaggtgtgc acagccacgt ggagatgatg ctgggggctc
acggtgactc tcaggaggcc ctggcctggc ctatctggag ccttctctgt gaaatgaggc
tggtaacgcc cactagcagg gttgtagggg acatggatet gtggccaect cctcaagggt
tgccacacge accaggtect gactgggagt ccggccccca gggcctgtgg atggctggcc
360
tgggcccagc ctccgcccc aagggtgctg gcacctggca tgtgcccgac agttggggcc
ggctggtggg aaggtgtgtg tcaggtggcg gagcctcggt gccaggatct cactcacgcg
480
t
481
<210> 2062
<211> 133
<212> PRT
<213> Homo sapiens
<400> 2062
Met Pro Gly Ala Ser Thr Leu Gly Gly Gly Gly Trp Ala Gln Ala Ser
                                    10
                                                        15
His Pro Gln Ala Leu Gly Ala Gly Leu Pro Val Arg Thr Trp Cys Val
                                25
                                                    30
            20
Trp Gln Pro Leu Arg Arg Trp Pro Gln Ile His Val Pro Tyr Asn Pro
                                                45
                            40
Ala Ser Gly Arg Tyr Gln Pro His Phe Thr Glu Lys Ala Pro Asp Arg
   50
                        55
Pro Gly Gln Gly Leu Leu Arg Val Thr Val Ser Pro Gln His His Leu
                    70
                                        75
His Val Ala Val His Thr Ser Val His Pro Gly Gly Val Phe Phe
                85
Ala Gln Ser Tyr His Pro Tyr Gly Val Thr Gly Leu Ala Arg Asn His
                                105
            100
Ser Ile Trp Gly His Thr Met Ala Thr Pro Ala Pro Ser Cys Val Ala
                            120
        115
Leu Leu Thr Arg Leu
    130
```

```
<210> 2063
<211> 419
<212> DNA
<213> Homo sapiens
<400> 2063
geeggegeeg tegagegegt geettteaat ategaggeee aagacatggt getgeteate
geggacacca atgeccegea catgetttee gaeggecaat acgeeteeeg eeggggeate
120
atcgacgccg tccaatctgc cgccggttgc tccatccgcg agatctcgaa tgcggtggac
tttgccgcca ccgtcaatcc cgccgaggcg gaactctatc gccgccgcgt gcaccacgtg
gtggaagaaa ccaaccggac cctagatgcc gctaccgcgc tggcatcttc cgatctagat
acatteegge ggettatgeg egagageeae ateteeetge gegaeettta tgaggteaee
acteeggage tegacteegt ttttaeegeg geeggegage tgggegeteg eatgannnn
419
<210> 2064
<211> 139
<212> PRT
<213> Homo sapiens
<400> 2064
Ala Gly Ala Val Glu Arg Val Pro Phe Asn Ile Glu Ala Gln Asp Met
                 5
1
Val Leu Leu Ile Ala Asp Thr Asn Ala Pro His Met Leu Ser Asp Gly
            20
                                25
Gln Tyr Ala Ser Arg Arg Gly Ile Ile Asp Ala Val Gln Ser Ala Ala
       35
Gly Cys Ser Ile Arg Glu Ile Ser Asn Ala Val Asp Phe Ala Ala Thr
                                            60
                       5.5
    50
Val Asn Pro Ala Glu Ala Glu Leu Tyr Arg Arg Arg Val His His Val
                                        75
                    70
Val Glu Glu Thr Asn Arg Thr Leu Asp Ala Ala Thr Ala Leu Ala Ser
                                    90
                85
Ser Asp Leu Asp Thr Phe Arg Arg Leu Met Arg Glu Ser His Ile Ser
            100
                                105
                                                    110
Leu Arg Asp Leu Tyr Glu Val Thr Thr Pro Glu Leu Asp Ser Val Phe
                            120
       115
Thr Ala Ala Gly Glu Leu Gly Ala Arg Met Xaa
    130
                        135
<210> 2065
<211> 598
<212> DNA
<213> Homo sapiens
geoggegeta tggcetetet getegeogae geogeogatg ceetteeegg egeaaaggtg
60
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cgcgcgaccg ttactggatc ggcgggattg ggaaccgcag aggcattggg ccttactttc
attcaggagg tcatagctga gacggccgcc gtccaacgtt ggaatcccga cgccgacgtg
cttctcgaac tcggtggtga ggatgccaag atcacctacc ttaagccggt ccccgaacag
cgcatgaatg gttcgtgtgc tggtggcacc ggtgccttca tcgaccagat ggctaccctg
300
ctgcacaccg acactcccgg cctcaatgac ctcgcatccc gagccaagac catccatccg
360
ategeetege getgtggtgt ttttgecaag teegaeette ageeeteat taacgaggga
420
gcccgccacg aggatetgge tgcctcggte etgcaggetg tegecactca gtgcattgcc
ggcctggcat gtggtcgccc gattcgaggt aaggtcatct tccttggcgg tccgcttcac
tttatgccaa gtttgcgaga cgctttctcg cgcgtcctcg acggtaaggt tgacgcgt
59B
<210> 2066
<211> 199
<212> PRT
<213> Homo sapiens
<400> 2066
Ala Gly Ala Met Ala Ser Leu Leu Ala Asp Ala Ala Asp Ala Leu Pro
1.
                5
                                   10
Gly Ala Lys Val Arg Ala Thr Val Thr Gly Ser Ala Gly Leu Gly Thr
            20
                                25
                                                    30
Ala Glu Ala Leu Gly Leu Thr Phe Ile Gln Glu Val Ile Ala Glu Thr
                                                45
        35
                            40
Ala Ala Val Gln Arg Trp Asn Pro Asp Ala Asp Val Leu Leu Glu Leu
                                            60
Gly Gly Glu Asp Ala Lys Ile Thr Tyr Leu Lys Pro Val Pro Glu Gln
                                       75
                   70
Arg Met Asn Gly Ser Cys Ala Gly Gly Thr Gly Ala Phe Ile Asp Gln
                                                        95
                85
                                    90
Met Ala Thr Leu Leu His Thr Asp Thr Pro Gly Leu Asn Asp Leu Ala
                               105
                                                    110
           100
Ser Arg Ala Lys Thr Ile His Pro Ile Ala Ser Arg Cys Gly Val Phe
                                                125
        115
                           120
Ala Lys Ser Asp Leu Gln Pro Leu Ile Asn Glu Gly Ala Arg His Glu
                       135
                                            140
   130
Asp Leu Ala Ala Ser Val Leu Gln Ala Val Ala Thr Gln Cys Ile Ala
                   150
                                       155
Gly Leu Ala Cys Gly Arg Pro Ile Arg Gly Lys Val Ile Phe Leu Gly
                                    170
               165
Gly Pro Leu His Phe Met Pro Ser Leu Arg Asp Ala Phe Ser Arg Val
                                185
           180
Leu Asp Gly Lys Val Asp Ala
       195
<210> 2067
<211> 366
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<212> DNA
<213> Homo sapiens
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aagategeeg aatggetgga tgeegaeetg caacagtggg acattteeeg egatgeaeeg
tactteggtt tegagatece gggegageca ggeaagtatt tetaegtgtg getggaegeg
ccgatcggct acatggccag tttcaagaac ctgtgcgacc gcacgccgga gctggacttc
gatgctttct gggccaagga ctccaccgcc gagctgtacc atttcatcgg caaggacatc
gtcaacttcc acgccctgtt ctggccggcg atgctcgaag gctcgggcta ccgtaaaccg
accggt
366
<210> 2068
<211> 122
<212> PRT
<213> Homo sapiens
<400> 2068
Phe Gln Gln Met Leu Gln Thr Trp Thr Arg Ser Gly Thr Leu Gln Glu
                                    10
 1
                 5
Ala Val Ala Asn Lys Ile Ala Glu Trp Leu Asp Ala Asp Leu Gln Gln
                                25
Trp Asp Ile Ser Arg Asp Ala Pro Tyr Phe Gly Phe Glu Ile Pro Gly
                            40
        35
Glu Pro Gly Lys Tyr Phe Tyr Val Trp Leu Asp Ala Pro Ile Gly Tyr
                                            60
                        55
Met Ala Ser Phe Lys Asn Leu Cys Asp Arg Thr Pro Glu Leu Asp Phe
                                        75
                    70
Asp Ala Phe Trp Ala Lys Asp Ser Thr Ala Glu Leu Tyr His Phe Ile
                                    90
                85
Gly Lys Asp Ile Val Asn Phe His Ala Leu Phe Trp Pro Ala Met Leu
            100
                                105
Glu Gly Ser Gly Tyr Arg Lys Pro Thr Gly
                            120
        115
<210> 2069
 <211> 280
 <212> DNA
<213> Homo sapiens
 <400> 2069
cctagagagg atggtggaga ctgtgcgtgt gcagggtgtt ccggaacctt ccctgggatg
catggggcct egeogeagge cateteteca gacetgggct caccetgece etgtgetgtt
geetttgget ggaatteeac eccageette tigeeteaag aacgeeette eccetteaga
 180
```

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totcatgggc acaggccccg tottcctaaa cggggtcaga gcccccagta atcatgacaa
agaccetete etegateaag etttggteaa geteetacee
280
<210> 2070
<211> 90
<212> PRT
<213> Homo sapiens
<400> 2070
Met Val Glu Thr Val Arg Val Gln Gly Val Pro Glu Pro Ser Leu Gly
                                    10
Cys Met Gly Pro Arg Arg Pro Ser Leu Gln Thr Trp Ala His Pro
           20
Ala Pro Val Leu Leu Pro Leu Ala Gly Ile Pro Pro Gln Pro Ser Cys
                            40
Leu Lys Asn Ala Leu Pro Pro Ser Asp Leu Met Gly Thr Gly Pro Val
                                            60
                       55
   50
Phe Leu Asn Gly Val Arg Ala Pro Ser Asn His Asp Lys Asp Pro Leu
                                        75
                    70
Leu Asp Gln Ala Leu Val Lys Leu Leu Pro
<210> 2071
<211> 399
<212> DNA
<213> Homo sapiens
<400> 2071
acgcgtgtcc agcagactta gaaagcaggt tcctcttgtc atacagcacg ttaacatagc
tgacgaggcc tgggtgtctt catcagtact gtgatgactc tttcaccttt gacttcagat
gctggcgctt tttacttttt gtgccaaact ctacacatga aacacttttg gaataactac
180
agacatgact ttctttatct ggggaaaagg agggcattaa accagattag gggctgggag
gggaggttgt caggggatga gctgctcctg aggaagaggc agagatcaag cttcactcag
300
cagetggatt etcacetagt ttatagactg aaateetgea aggtggttac aacagtgaac
aatatgttca tacataaaga ctctaccctc aggtgatca
399
<210> 2072
<211> 100
<212> PRT
<213> Homo sapiens
<400> 2072
Met Thr Leu Ser Pro Leu Thr Ser Asp Ala Gly Ala Phe Tyr Phe Leu
                5
                                    10
1
Cys Gln Thr Leu His Met Lys His Phe Trp Asn Asn Tyr Arg His Asp
```

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Phe Leu Tyr Leu Gly Lys Arg Arg Ala Leu Asn Gln Ile Arg Gly Trp
                            40
                                               45
Glu Gly Arg Leu Ser Gly Asp Glu Leu Leu Leu Arg Lys Arg Gln Arg
                       55
Ser Ser Phe Thr Gln Gln Leu Asp Ser His Leu Val Tyr Arg Leu Lys
                                       75
                   70
Ser Cys Lys Val Val Thr Thr Val Asn Asn Met Phe Ile His Lys Asp
Ser Thr Leu Arg
            100
<210> 2073
<211> 339
<212> DNA
<213> Homo sapiens
<400> 2073
ggatccactt ctgtgccttt ccagcttcta gaggctgcct gcgttccttg gctcgtggcc
cettecteca cetteaagee ageageggag geetgagtee tteteatgee atetetetgt
tetetetect geeteeteet eeacactgaa ggacceetgt gateacactg geeceeccac
180
cggatgaccc aggataatcc atctccctgt ttgaaggtcg gctgattagc aaccttcatt
ccatctgcct ccttcattcc ccctggccat gtaatgggat tcacagcttc tgggggattag
gacatggaca tettgtggcg ggggcataat tetgtcgac
<210> 2074
<211> 85
<212> PRT
<213> Homo sapiens
<400> 2074
Met Lys Glu Ala Asp Gly Met Lys Val Ala Asn Gln Pro Thr Phe Lys
                                    10
Gln Gly Asp Gly Leu Ser Trp Val Ile Arg Trp Gly Gly Gln Cys Asp
                                                    30
           20
                                25
His Arg Gly Pro Ser Val Trp Arg Arg Arg Gln Glu Arg Glu Gln Arg
       35
                           40
Asp Gly Met Arg Arg Thr Gln Ala Ser Ala Ala Gly Leu Lys Val Glu
                       55
                                           60
Glu Gly Ala Thr Ser Gln Gly Thr Gln Ala Ala Ser Arg Ser Trp Lys
Gly Thr Glu Val Asp
                85
<210> 2075
<211> 481
<212> DNA
<213> Homo sapiens
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<400> 2075
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atcetgageg etectgeeca actgggeetg etgaggaaga teegeetetg geaegaeage
180
cgtgggcctt ccccaggctg gttcatcagc cacgtgatgg tgaaggagct gcacacggga
cagggctggt tettecetge ceagtgetgg etgtetgeeg geaggeatga tggtegegtg
gagcgggagc tcacctgtct gcaaggggga ctcggcttct ggaagctttt ctattgcaag
ttcacagagt acctggagga tttccatgtc tggctgtcgg tgtacagcag gccctcctcc
ageogetace tgcacacgee gegeeceace gtgteettet ecetgetgtg egtetacgeg
480
481
<210> 2076
<211> 160
<212> PRT
<213> Homo sapiens
<400> 2076
Xaa Ala Arg Leu Thr Ser Lys Val Tyr Ile Val Leu Cys Gly Asp Asn
                                    10
                5
Gly Leu Ser Glu Thr Lys Glu Leu Ser Cys Pro Glu Lys Ser Leu Phe
                                25
                                                    30
           20
Glu Arg Asn Ser Arg His Thr Phe Ile Leu Ser Ala Pro Ala Gln Leu
                                                45 .
                            40
       35
Gly Leu Leu Arg Lys Ile Arg Leu Trp His Asp Ser Arg Gly Pro Ser
                                           60
                       55
Pro Gly Trp Phe Ile Ser His Val Met Val Lys Glu Leu His Thr Gly
                                        75
                   70
Gln Gly Trp Phe Phe Pro Ala Gln Cys Trp Leu Ser Ala Gly Arg His
                                   90
                85
Asp Gly Arg Val Glu Arg Glu Leu Thr Cys Leu Gln Gly Gly Leu Gly
           100
                               105
                                                    110
Phe Trp Lys Leu Phe Tyr Cys Lys Phe Thr Glu Tyr Leu Glu Asp Phe
                           120
       115
His Val Trp Leu Ser Val Tyr Ser Arg Pro Ser Ser Ser Arg Tyr Leu
                       135
                                           140
   130
His Thr Pro Arg Pro Thr Val Ser Phe Ser Leu Leu Cys Val Tyr Ala
                                       155
145
                  150
<210> 2077
<211> 1410
<212> DNA
<213> Homo sapiens
<400> 2077
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ncagagtgtt ttgagctatc tggtatccca aatgatgtga atactttcag aaaccaatgg
caaattgaac ccaactgttt gcgaattcgg cacgagtaaa gatctttttt tttttttgt
ttttttttt tttttttt ttttgctttc taaagtggct ttaatatcac acaagcggct
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agtccaggag ccttaggaag gctgaaacaa gccctgacca gcaggcttag ttgtcctgag
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ctgggtcccc gagcacagtg ccagggaaga cacccccaat ccccatctga acaggccgag
ggcagcatgg gaaaggctca gactgcaggt tcatcccgca ggatggtaag gacacgtgct
cetecetege aagageagge ttgtgeacag eeeggeacag ggecagecag ggeggeecet
gcggctgtgc agcgcttacc agggggagga gttcagccat caggaccttt tccaagtgga
totgotggto cagcacagoo actogoagot tgagggoogo cagggtotgo agotootggg
660
tgctggagta gacaagcagc tgggnnggct ccatgcaggc tccgctctac ccccacagga
720
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780
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1080
acaggetega gttetgggaa getgetttee tgaatgeege aggeageege ageaggtgee
1140
cetteteett gagtgtgaag gettetgggg eetgaggage ageggatggg gecatttget
ggtccctgag gcccgcccca ggcctggggg ttcgggctcc catcccaaca cgggtcccat
ccccactga cagcagccgg cgctcagggt ggcccttggc aggcaccgtg gtctggcgga
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gggcggaggc tgtcgtgcca gaagaggtga
1410
<210> 2078
<211> 106
<212> PRT
<213> Homo sapiens
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<400> 2078
Gly His Leu Val Gln Phe Thr Arg Phe Pro Arg Glu Ala Gln Ala Ser
Leu Gly Pro Arg Ala Gln Cys Gln Gly Arg His Pro Gln Ser Pro Ser
                                25
           20
Glu Gln Ala Glu Gly Ser Met Gly Lys Ala Gln Thr Ala Gly Ser Ser
                            40
                                                45
Arg Arg Met Val Arg Thr Arg Ala Pro Pro Ser Gln Glu Gln Ala Cys
                                            60
                        55
    50
Ala Gln Pro Gly Thr Gly Pro Ala Arg Ala Ala Pro Ala Ala Val Gln
                                        75
Arg Leu Pro Gly Gly Gly Val Gln Pro Ser Gly Pro Phe Pro Ser Gly
                85
                                    90
Ser Ala Gly Pro Ala Gln Pro Leu Ala Ala
            100
<210> 2079
<211> 565
<212> DNA
<213> Homo sapiens
<400> 2079
atttacctcg caaccgaccc tgatcgtgaa ggtgaaagca tcagctggca catccagcag
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120
gaagaggcac tggccaatcc tcgacaaatc gatctgaaca gagttgcctc acaggaatgc
180
eggegtgtgc ttgacegett ggtggggtac etggtgacec aagagttgeg gegeetgatg
ggcaaaccta cttccgctgg ccgcgttcaa tcacccgccg tgtttcttgt ggtcttgcgc
gaacgcgaga tccgcaactt tcaggtgatc aatcactttg gcgtgcgtct gttctttgcc
gatgtaagtc ggggcaccac ttggtatgcc gagtggcaac cggtaccgga tttcgcaagc
aagcacttcc cctatgttca ggatagcaac ctggctcagc acgtcgccgg cactcgaaat
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tcatccactc ttcaacaggc cgcca
565
<210> 2080
<211> 188
<212> PRT
<213> Homo sapiens
<400> 2080
Ile Tyr Leu Ala Thr Asp Pro Asp Arg Glu Gly Glu Ser Ile Ser Trp
                                   10
His Ile Gln Gln Val Leu Ala Val Lys Ser Tyr Lys Arg Ile Thr Phe
                                                    30
           20
                                25
Asn Glu Ile Thr Leu Lys Arg Val Glu Glu Ala Leu Ala Asn Pro Arg
```

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40
Gln Ile Asp Leu Asn Arg Val Ala Ser Gln Glu Cys Arg Arg Val Leu
                                          60
Asp Arg Leu Val Gly Tyr Leu Val Thr Gln Glu Leu Arg Arg Leu Met
                   70
Gly Lys Pro Thr Ser Ala Gly Arg Val Gln Ser Pro Ala Val Phe Leu
                                90
              85
Val Val Leu Arg Glu Arg Glu Ile Arg Asn Phe Gln Val Ile Asn His
                             105
          100
Phe Gly Val Arg Leu Phe Phe Ala Asp Val Ser Arg Gly Thr Thr Trp
                                              125
                          120
       115
Tyr Ala Glu Trp Gln Pro Val Pro Asp Phe Ala Ser Lys His Phe Pro
                                          140
                     135
Tyr Val Gln Asp Ser Asn Leu Ala Gln His Val Ala Gly Thr Arg Asn
                                      155
                 150
Val Val Glu Ser Cys Glu Asp Arg Lys Ala Glu Arg His Pro Pro
                                  170
               165
Ala Pro Phe Ile Ser Ser Thr Leu Gln Gln Ala Ala
           180
                               185
<210> 2081
<211> 319
<212> DNA
<213> Homo sapiens
<400> 2081
aagettatgg aaaaacgggg atacggagag gagtatataa atcgetataa aatgatgaca
aggttccatc atcaacgggt tccactagta attttggtgt gtggaactgc ctgtactgga
aaatcaacaa tegetacaca acttgeteag aggeteaatt tgeetaatgt tttgeagaeg
gacatggtgt atgagetget geggacatea acagatgege caettaette agtteetgtg
tgggctcgcg attttaattc acctgaagag cttatcactg aattctgcag agaatgcaga
300
gttgtacgca agggtttgg
319
<210> 2082
<211> 106
<212> PRT
<213> Homo sapiens
Lys Leu Met Glu Lys Arg Gly Tyr Gly Glu Glu Tyr Ile Asn Arg Tyr
Lys Met Met Thr Arg Phe His His Gln Arg Val Pro Leu Val Ile Leu
                               25
Val Cys Gly Thr Ala Cys Thr Gly Lys Ser Thr Ile Ala Thr Gln Leu
                         40
       3.5
Ala Gln Arg Leu Asn Leu Pro Asn Val Leu Gln Thr Asp Met Val Tyr
                                           60
                      55
Glu Leu Leu Arg Thr Ser Thr Asp Ala Pro Leu Thr Ser Val Pro Val
```

```
70
                                      75
Trp Ala Arg Asp Phe Asn Ser Pro Glu Glu Leu Ile Thr Glu Phe Cys
                            90 ·
              85
Arg Glu Cys Arg Val Val Arg Lys Gly Leu
           100
                              105
<210> 2083
<211> 382
<212> DNA
<213> Homo sapiens
<400> 2083
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atacctactg ttgaatgcaa ctgtggccac gttttctgct ttggctgtgg tttggatgga
caccageegg teatttgtge tgttgteege ttgtggetga aaaaatgtge ggatgacagt
gagacgteca actggategg egetaatace aaggaatgee ecaaatgetg ttegaegatt
gaaaagaatg gcggatgtaa tcatatgacg tgtcgcaagt gcaaatacga attttgttgg
atttgctcgg gcccatggtc ggagcacgga aacaactatt acaactgcaa tcggtacgat
360
gaaaaggcag gagatgaagg tn
382
<210> 2084
<211> 127
<212> PRT
<213> Homo sapiens
<400> 2084
Xaa Pro Asp Cys Asp Met Ala Val Glu Cys Ala Val Thr Arg Lys Gln
                                 10
               5
Leu Tyr Thr Ile Ile Pro Thr Val Glu Cys Asn Cys Gly His Val Phe
                                                 30
           20
                           25
Cys Phe Gly Cys Gly Leu Asp Gly His Gln Pro Val Ile Cys Ala Val
    35
                          40
Val Arg Leu Trp Leu Lys Lys Cys Ala Asp Asp Ser Glu Thr Ser Asn
                                       60
                     55
Trp Ile Gly Ala Asn Thr Lys Glu Cys Pro Lys Cys Cys Ser Thr Ile
                                      75
                  70
Glu Lys Asn Gly Gly Cys Asn His Met Thr Cys Arg Lys Cys Lys Tyr
              85
                                 90
Glu Phe Cys Trp Ile Cys Ser Gly Pro Trp Ser Glu His Gly Asn Asn
                             105
           100
Tyr Tyr Asn Cys Asn Arg Tyr Asp Glu Lys Ala Gly Asp Glu Gly
                         120
       115
<210> 2085
<211> 478
<212> DNA
<213> Homo sapiens
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<400> 2085
nnggatecca aagacegega tattgecatg gtgttecaaa actatgeeet etaeeegeae
atgactgtcg ccgacaacat gggttttgcc ctcaaactgg cgaaagtgga taagaaagaa
atccggcgtc gcgtggagga agccgccgaa ctcctcgacc tcaccgacta tctggaccgc
aaacccaagg cactctccgg tggccagcgg cagcgcgtcg ccatggggcg cgctattgtt
egttececce gegtettett gatggaegag eetettteta acetggatge gegtetgegt
gtccgcaccc gcgcccagat tgcggaactg cagcgccgcc tgggcaccac caccgtttat
gtcacccatg accaggtgga ggctatgacg atgggggatc gtgtggctgt tetetgtgcc
gggaaactgc agcaggtgga tactccacgt aatcttttcg accaccccgc taacgcgt
478
<210> 2086
<211> 159
<212> PRT
<213> Homo sapiens
<400> 2086
Xaa Asp Pro Lys Asp Arg Asp Ile Ala Met Val Phe Gln Asn Tyr Ala
                                    10
1
Leu Tyr Pro His Met Thr Val Ala Asp Asn Met Gly Phe Ala Leu Lys
            20
Leu Ala Lys Val Asp Lys Lys Glu Ile Arg Arg Arg Val Glu Glu Ala
                            40
Ala Glu Leu Leu Asp Leu Thr Asp Tyr Leu Asp Arg Lys Pro Lys Ala
                                            60
   50
Leu Ser Gly Gly Gln Arg Gln Arg Val Ala Met Gly Arg Ala Ile Val
                                        75
                    70
Arg Ser Pro Arg Val Phe Leu Met Asp Glu Pro Leu Ser Asn Leu Asp
                                    90
                85
Ala Arg Leu Arg Val Arg Thr Arg Ala Gln Ile Ala Glu Leu Gln Arg
                                105
                                                    110
            100
Arg Leu Gly Thr Thr Thr Val Tyr Val Thr His Asp Gln Val Glu Ala
                                                125
        115
                            120
Met Thr Met Gly Asp Arg Val Ala Val Leu Cys Ala Gly Lys Leu Gln
                                            140
                        135
Gln Val Asp Thr Pro Arg Asn Leu Phe Asp His Pro Ala Asn Ala
                                        155
                    150
<210> 2087
<211> 731
<212> DNA
<213> Homo sapiens
<400> 2087
gataattoto tacaoggoat gagotgggga ogtaccocco ttgocaacgt cacotcaogg
60
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togtacogtg gtgattagca gotagoogag gogotagoog coatataaga ttoccaaatt
aaaagaaaaa gcattgcgtc ggccaagaat tgctgtcgct gctgcaacgg ctactgcgct
ggtcggatca atcgcagcaa tcacccctc ccccaggcag aagctaactc caataggcca
cgctcggtag ctcaagccgc tatcgccacg gatggaaagg ggataatcaa caaggactgc
300
cqtqatqcaq tcatcaacga tgcaaagctg cgtgccgcga ttgccggtgc gttggttaag
360
gctggattta gttccgccga cgcggtggct ctagcgccgc gtattgccag agaaatggca
420
aaagagggeg teeteeteat caaceaceae aagetaaagg eteteategg ageceaggtg
ggtctgctca ctgatgcgaa gatccagcgt gctgccgctg cagtggacct cggcatcaaa
gccactctag ctgcgacaat cattcccaac gcgctgcatt cagcggcatt caaggatgcg
600
gtggtcgcaa atcttgtcgc cgccggtctg acaagaagtt ggcaaaggct acggctgtcg
660
ccattgccgc aactgcgctc aatcccgctc tcgggccgat cgcaaagact gaggccatta
720
aggetgagat c
731
<210> 2088
<211> 105
<212> PRT
<213> Homo sapiens
<400> 2088
Met Ala Lys Glu Gly Val Leu Leu Ile Asn His His Lys Leu Lys Ala
                                    10
Leu Ile Gly Ala Gln Val Gly Leu Leu Thr Asp Ala Lys Ile Gln Arg
                                                    30
            20
Ala Ala Ala Val Asp Leu Gly Ile Lys Ala Thr Leu Ala Ala Thr
                                                45
       35
                            40
Ile Ile Pro Asn Ala Leu His Ser Ala Ala Phe Lys Asp Ala Val Val
                        55
                                            60
    50
Ala Asn Leu Val Ala Ala Gly Leu Thr Arg Ser Trp Gln Arg Leu Arg
                                        75
65
                    70
Leu Ser Pro Leu Pro Gln Leu Arg Ser Ile Pro Leu Ser Gly Arg Ser
                                    90
                85
Gln Arg Leu Arg Pro Leu Arg Leu Arg
                                105
            100
<210> 2089
<211> 315
<212> DNA
<213> Homo sapiens
<400> 2089
accggtgtgg accaggctca gctgcgcgac gccatgtttt cctaccttcc ccaccacaag
60
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ctcggggaat tcgacatcga tctgttgctg gaccatcgcg attcccgtca gcccatcatc
ttcgacaccg accacttcga ggggtacgag cgcccccgcc tcgtgctgca cgaagtcacc
gatcaacttg gccaagcgtt ccttgtattg gaaggcccag agccggctct cggctgggaa
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togttggtgg cgtctctcac gagtcttgtc gactctatgg ggatccgtct gaccggcatt
300
accgattcga tcccg
315
<210> 2090
<211> 105
<212> PRT
<213> Homo sapiens
<400> 2090
Thr Gly Val Asp Gln Ala Gln Leu Arg Asp Ala Met Phe Ser Tyr Leu
                                  10
Pro His His Lys Leu Gly Glu Phe Asp Ile Asp Leu Leu Asp His
                                                    30
                                25
Arg Asp Ser Arg Gln Pro Ile Ile Phe Asp Thr Asp His Phe Glu Gly
                                                45
       35
                            40
Tyr Glu Arg Pro Arg Leu Val Leu His Glu Val Thr Asp Gln Leu Gly
                                            60
    50
                       55
Gln Ala Phe Leu Val Leu Glu Gly Pro Glu Pro Ala Leu Gly Trp Glu
                                        75
65
Ser Leu Val Ala Ser Leu Thr Ser Leu Val Asp Ser Met Gly Ile Arg
                                    90
                85
Leu Thr Gly Ile Thr Asp Ser Ile Pro
                                105
           100
<210> 2091
<211> 322
<212> DNA
<213> Homo sapiens
<400> 2091
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tgtgtccctg tccagttctg tnnctgtgtg tgcgcgcatc tctctctgtg tctctgtnng
agtototgto tettttgtot etgtetetet etgtgtetet geccattttg gtetetgett
180
tettteetet gtgtgtetet ceatttetgt etetetteet etgtetetet ceatttetgt
ctotgetett tttetetetg tgtgtetett ttgtetetet gtttetetge gtgtetetgt
300
ccatttctgt cccttcacgc gt
322
<210> 2092
<211> 107
<212> PRT
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<213> Homo sapiens <400> 2092 Thr Leu Val His Cys Leu Cys Leu Cys Val Phe Leu Ser Val Ser Leu 10 Cys Leu Cys Leu Cys Val Pro Val Gln Phe Cys Xaa Cys Val Cys Ala 25 20 His Leu Ser Leu Cys Leu Cys Xaa Ser Leu Cys Leu Phe Cys Leu Cys 45 40 Leu Ser Leu Cys Leu Cys Pro Phe Trp Ser Leu Leu Ser Phe Leu Cys 60 55 Val Ser Leu His Phe Cys Leu Ser Ser Ser Val Ser Leu His Phe Cys 75 70 65 Leu Cys Ser Phe Ser Leu Cys Val Ser Leu Leu Ser Leu Cys Phe Ser 90 85 Ala Cys Leu Cys Pro Phe Leu Ser Leu His Ala 100 <210> 2093 <211> 324 <212> DNA <213> Homo sapiens <400> 2093 geeggegtea tgcaaacgat caaggtggeg caatttegee tetgecatag tegaaaaatg tttgtggtgg cctacccgcg agagacccag gagatggtgc tcgatgcgca taaccgcgcc 120 tttgcgttct ttggcggcgt accgcagcgg gttatctacg acaaccttaa aaccgcagtg gatgcgatct tggtcggcaa ggatcgaatc ttcaaccggc gcttcctggc gttggctaat cattacctgt ttgaacctgt agcctgtacg cctgctgctg gctgggagaa gggccaagtt gagaatcaag ttcgcaacat acgc 324 <210> 2094 <211> 108 <212> PRT <213> Homo sapiens <400> 2094 Ala Gly Val Met Gln Thr Ile Lys Val Ala Gln Phe Arg Leu Cys His 10 1 5 Ser Arg Lys Met Phe Val Val Ala Tyr Pro Arg Glu Thr Gln Glu Met 25 Val Leu Asp Ala His Asn Arg Ala Phe Ala Phe Phe Gly Gly Val Pro 3.5 40 Gln Arg Val Ile Tyr Asp Asn Leu Lys Thr Ala Val Asp Ala Ile Leu 60 Val Gly Lys Asp Arg Ile Phe Asn Arg Arg Phe Leu Ala Leu Ala Asn 70

His Tyr Leu Phe Glu Pro Val Ala Cys Thr Pro Ala Ala Gly Trp Glu

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95
                                    90
                85
Lys Gly Gln Val Glu Asn Gln Val Arg Asn Ile Arg
                                105
           100
<210> 2095
<211> 402
<212> DNA
<213> Homo sapiens
<400> 2095
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cgcgtggtgg gcgtgggttc agtgggcacc cactccctgg tactgctact gtccggcccc
aatgatgaac ctcttgtgct gcaagtgaaa gaagccctcc ccagtgtcct caccacccat
gggaaactgc cggatgcttt ttcggaactg tccgctgggg actcctccgg gctcctcccc
300
gataatottg ataagcatat taaagccggc aatggctacc gggtggtggc gtgccagcag
attetgeagg cecactegga teegetgetg gggtggaege gt
402
<210> 2096
<211> 134
<212> PRT
<213> Homo sapiens
<400> 2096
Pro Val Thr Asp Gln Glu Glu Ala Asp Asn Met Ile Ala Ser Phe Asp
                                    10
Thr Tyr Val Arg Thr Leu Pro Pro Ala Ala Asn Leu Leu Leu Lys Gln
                                                    30
                                25
           20
Phe His Ile Val Asp Val Ala Arg Arg Val Val Gly Val Gly Ser Val
        35
                            40
Gly Thr His Ser Leu Val Leu Leu Leu Ser Gly Pro Asn Asp Glu Pro
                                            60
    50
Leu Val Leu Gln Val Lys Glu Ala Leu Pro Ser Val Leu Thr Thr His
                    70
Gly Lys Leu Pro Asp Ala Phe Ser Glu Leu Ser Ala Gly Asp Ser Ser
                                    90
Gly Leu Leu Pro Asp Asn Leu Asp Lys His Ile Lys Ala Gly Asn Gly
                                                    110
                                105
            100
Tyr Arg Val Val Ala Cys Gln Gln Ile Leu Gln Ala His Ser Asp Pro
                            120
        115
Leu Leu Gly Trp Thr Arg
    130
<210> 2097
<211> 641
<212> DNA
<213> Homo sapiens
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negtttetca ecegecetee agecteatea geagetgtgg geteaggeee ecetecegag
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gccatgagca aggaggaggc cgaccaggta ctgggcgtgc agctggggct gtctgtccgc
180
caccogocte cacgooteae tteaggetee eteccageca ggegtgggee tggeceteae
tgtcgctgct ccacatgctg tcactcgtct cctccccagt cctgcctcat cctcacnccg
300
cogtocotot gogtgtoact ctotgcotgt cotcactggt tcagggaccc ccagcotote
tttattcggc tctatctgac cctggctctg cctctgactc tgcctctggc ccctcccgtc
atgecectea caetetetet eccecagece cegteetgeg geceegagga egaegeceag
ctccagctgg cccttagttt gagccgagaa gagcatgata aggtcagagc agcctccctg
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cccaccatcc tgctgggccc gaageccaca ggctcacgcg t
641
<210> 2098
<211> 213
<212> PRT
<213> Homo sapiens
<400> 2098
Xaa Phe Leu Thr Arg Pro Pro Ala Ser Ser Ala Ala Val Gly Ser Gly
                                    10
Pro Pro Pro Glu Ala Glu Gln Ala Trp Pro Gln Ser Ser Gly Glu Glu
                                                    30
                                25
           20
Glu Leu Gln Leu Gln Leu Ala Leu Ala Met Ser Lys Glu Glu Ala Asp
                            40
                                                45
Gln Val Leu Gly Val Gln Leu Gly Leu Ser Val Arg His Pro Pro Pro
                       55
                                            60
   50
Arg Leu Thr Ser Gly Ser Leu Pro Ala Arg Arg Gly Pro Gly Pro His
                                        75
                    70
Cys Arg Cys Ser Thr Cys Cys His Ser Ser Pro Pro Gln Ser Cys Leu
                                    90
               85
Ile Leu Thr Pro Pro Ser Leu Cys Val Ser Leu Ser Ala Cys Pro His
                                                    110
                                105
           100
Trp Phe Arg Asp Pro Gln Pro Leu Phe Ile Arg Leu Tyr Leu Thr Leu
                                                125
                            120
       115
Ala Leu Pro Leu Thr Leu Pro Leu Ala Pro Pro Val Met Pro Leu Thr
                                           140
                       135
Leu Ser Leu Pro Gln Pro Pro Ser Cys Gly Pro Glu Asp Asp Ala Gln
                                       155
                   150
Leu Gln Leu Ala Leu Ser Leu Ser Arg Glu Glu His Asp Lys Val Arg
                                    170
               165
Ala Ala Ser Leu Ser Leu Pro Leu Pro Gly Ala Pro Leu Arg Pro Ala
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185
           180
Pro Ser Pro Leu Pro Lys Ser Pro Pro Thr Ile Leu Leu Gly Pro Lys
                           200
      195
Pro Thr Gly Ser Arg
   210
<210> 2099
<211> 347
<212> DNA
<213> Homo sapiens
<400> 2099
acgcgtgtgc cctgtcccct gccagacatg gacagcacct gcccacaggg gtgctcagtg
gaggcagtgc ccagggctgc tgtgcccatg cgtgtaccct gtcctctgcc agacgcggac
ageacetgee caeggggtge teagtggagg cagtgeecag ggetgetgtg eccaegtgtg
tgccctcaga catccctccc cagacacttg ctgcatgacc caggaggtgg caggcagtgg
240
cagtattctg ttcaggtgag ctcagaggtg gcaggtgcct ggctgcggcc ctgcctcact
ccgacagect etgectecag tecaetgget cateceacat ggeetga
347
<210> 2100
<211> 106
<212> PRT
<213> Homo sapiens
<400> 2100
Met Asp Ser Thr Cys Pro Gln Gly Cys Ser Val Glu Ala Val Pro Arg
                                   10
Ala Ala Val Pro Met Arg Val Pro Cys Pro Leu Pro Asp Ala Asp Ser
                                                    3.0
                                25
           20
Thr Cys Pro Arg Gly Ala Gln Trp Arg Gln Cys Pro Gly Leu Leu Cys
                           40
       35
Pro Arg Val Cys Pro Gln Thr Ser Leu Pro Arg His Leu Leu His Asp
                                            60
   50
                       55
Pro Gly Gly Gly Arg Gln Trp Gln Tyr Ser Val Gln Val Ser Ser Glu
                   70
                                        75
65
Val Ala Gly Ala Trp Leu Arg Pro Cys Leu Thr Pro Thr Ala Ser Ala
                                   90
                85
Ser Ser Pro Leu Ala His Pro Thr Trp Pro
                                105
           100
<210> 2101
<211> 549
<212> DNA
<213> Homo sapiens
<400> 2101
ctctctccga ccgcgttgac ggtccagccg gtccgcacgc cgtcatcgga atcggcatca
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acgtttcgat ggggcgtgac gaattgcccc tgccgacggc gacctctctg gctctgtgtg
ggttgaacca cgacaagaat gagttgetgg ccagcettet catecacett gacgagetat
180
taacagtgtg gttggagacc ggaacggtgc gggatcagta tgtggcccgc tgtgacacca
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ccctgacct
549
<210> 2102
<211> 113
<212> PRT
<213> Homo sapiens
<400> 2102
Met Gly Arg Asp Glu Leu Pro Leu Pro Thr Ala Thr Ser Leu Ala Leu
                                    10
                5
1
Cys Gly Leu Asn His Asp Lys Asn Glu Leu Leu Ala Ser Leu Leu Ile
                                25
           20
His Leu Asp Glu Leu Leu Thr Val Trp Leu Glu Thr Gly Thr Val Arg
                            40
Asp Gln Tyr Val Ala Arg Cys Asp Thr Ile Gly Thr Pro Val Arg Leu
                        55
   50
Thr Phe Asp Pro Glu Ile Val Gly Gly Glu Gly Ala Ile Glu Gly
                                        75
                   70
Ile Gly Val Asp Val Asp Val Asp Gly Ala Ile Val Val Glu Thr Ser
                                    90
               85
Asp Gly Arg Arg Ser Phe Asn Ala Ala Asp Val His His Leu Arg Thr
                               105
           100
Arg
<210> 2103
<211> 459
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180
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His Glu Leu Leu Ala Ser Gly Val Trp Glu Gly Asp Ala Tyr Arg Tyr
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Asp Gln Val Gly Met Glu Ile Lys Gly Asn Asp Val Gly Ile Val Gly
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Cys Gly Ala Val Gly Cys Arg Val Ala Ala Val Met Ala Ala Met Gly
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Ala Thr Val Arg Val Phe Asp Pro Trp Ala Thr Pro Asp Ser Phe Pro
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Ala Gly Val Met Ala Cys Asp Asp Leu Asp Glu Val Leu Arg Leu Ser
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Arg Ile Leu Thr Leu His Ala Arg Ala Asn Glu Asp Asn Arg His Met
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Ile Gly Val Glu Gln Leu Ala Glu Met Pro Asp Gly Ser Val Leu Val
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300
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Gln Ser Glu Leu Thr Asn Met Asp Leu Ala Ala Leu Phe Ser Asp Thr
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Pro Ala Asn Ala Ser Gly Ser Ala Gly Gly Ser Asp Glu Ala Leu Asn
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Ser Gly Ile Leu Thr Ile Asp Val Thr Ser Val Ser Ser Ser Leu Gly
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Gly Asn Leu Pro Ala Asn Asn Ser Ser Leu Gly Pro Met Glu Pro Leu
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                                   90
Val Leu Val Ala His Ser Asp Ile Pro Pro Ser Leu Asp Ser Pro Leu
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           100
Val Leu Gly Thr Ala Ala Thr Val Leu Gln Gln Gly Ser Phe Ser Val
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                           120
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Asp Asp Val Gln Thr Val Ser Ala Gly Ala Leu Gly Cys Leu Val Ala
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                                           140
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Leu Pro Met Lys Asn Leu Ser Asp Asp Pro Leu Ala Leu Thr Ser Asn
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Ser Asn Leu Ala Ala His Ile Thr Thr Pro Thr Ser Ser Ser Thr Pro
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               165
Arg Glu Asn Ala Ser Val Pro Glu Leu Leu Ala Pro Ile Lys Val Glu
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                              185
Pro Asp Ser Pro Ser Arg Pro Gly Ala Val Gly Gln Gln Glu Gly Ser
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                          200
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His Gly Leu Pro Gln Ser Thr Leu Pro Ser Pro Ala Glu Gln His Gly
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Ala Gln Asp Thr Glu Leu Ser Ala Gly Thr Gly Asn Phe Tyr Leu Val
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gcctccctcc aaatcaccag ttcttgttct ggtgaacccc tggacctgga ttccaaggat
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ccncn
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Ser Gly Leu Val Ser Glu Asn Thr Pro Arg Pro Asp Asp Ser Arg Ala
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Ile Ala Pro Ala Ser Leu Gln Ile Thr Ser Ser Cys Ser Gly Glu Pro
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Leu Cys Pro Ala Ser Asn Pro Ile Leu Ala Xaa Pro
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120
taccaagegt ccagtgagge tececcageg aaaeggagga acgaaaette attteteeca
gccaagaaaa ctagtgttaa agaaactcag aggactttta aggggaacgc acaaaaaatg
240
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Gln Ala Lys Ala Thr Lys Arg Lys Tyr Gln Ala Ser Ser Glu Ala Pro
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Pro Ala Lys Arg Arg Asn Glu Thr Ser Phe Leu Pro Ala Lys Lys Thr
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Ser Val Lys Glu Thr Gln Arg Thr Phe Lys Gly Asn Ala Gln Lys Met
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                   70
Phe Ser Pro Lys Lys His Ser Val Ser Thr Ser Asp Arg Asn Gln Glu
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Glu Arg Gln Cys Ile Lys Thr Ser Ser Leu Phe Lys Asn Asn Pro Asp
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Ile Pro Glu Leu His Arg Pro Val Val Lys Gln Val Gln Glu Lys Val
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                           120
Phe Thr Ser Ala Ala Phe His Glu Leu Gly Leu His Pro His Leu Ile
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Ser Thr Ile Asn Thr Val Leu Lys Met Ser Ser Met Thr Ser Val Gln
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Lys Gln Ser Ile Pro Val Leu Leu Glu Gly Arg Asp Ala Leu Val Arg
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Ser Gln Thr Gly Ser Gly Lys Ile Leu Ala Tyr Cys Ile Pro Val Val
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                               185
Gln Ser Leu Gln Ala Met Glu Ser Lys Ile Gln Arg Ser Asp Gly Pro
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                           200
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Tyr Ala Leu Val Leu Val Pro Thr Arg Glu Val Ser Arg Leu Pro Phe
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Gly Thr Ser Phe Lys His Met Leu Ser
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Gly Arg Gly Asn Lys Leu Ala Ile Ala Glu Leu Val Ala Leu Ala Glu
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Leu Phe Met Pro Ile Lys Leu Val Pro Lys Gln Phe Glu Gly Leu Val
Glu Arg Val Arg Ser Ala Leu Glu Arg Leu Arg Ala Gln Glu Arg Ala
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Ile Met Gln Leu Cys Val Arg Asp Ala Arg Met Pro Arg Ala Asp Phe
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Gly Asn Pro Leu Asn Pro Lys Ser Lys Gly Lys Leu Thr Leu Asp Ser
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Ser Phe Asn Ile Ala Ser Pro Ala Ser Gln Ala Trp Ile Leu His Phe
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Cys Gln Lys Leu Arg Asn Gln Thr Phe Phe Tyr Gln Thr Asp Glu Gln
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Asp Phe Thr Ser Cys Phe Ile Glu Thr Phe Lys Gln Trp Met Glu Asn
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Gln Asp Cys Asp Glu Pro Ala Leu Tyr Pro Cys Cys Ser His Trp Ser
            100
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                                                    110
Phe Pro Tyr Lys Gln Glu Ile Phe Glu Leu Cys Ile Lys Arg Ala Ile
                                                125
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Met Glu Leu Glu Arg Ser Thr Gly Tyr His Leu Asp Ser Lys Thr Pro
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Gly Pro Arg Phe Asp Ile Asn Asp Thr Ile Arg Ala Val Val Leu Glu
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Phe Gln Ser Thr Tyr Leu Phe Thr Leu Ala Tyr Glu Lys Met His Gln
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Phe Tyr Lys Glu Val Asp Ser Trp Ile Ser Ser Glu Leu Ser Ser Ala
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            180
Pro Glu Gly Leu Ser Asn Gly Trp Phe Val Ser Asn Leu Glu Phe Tyr
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Asp Leu Gln Asp Ser Leu Ser Asp Gly Thr Leu Ile Ala Met Gly Leu
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    210
                       215
Ser Val Ala Val Ala Phe Ser Val Met Leu Lèu Thr Thr Trp Asn Ile
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Ser	Val	Thr	Ile	Ser	Val	Ala	Val	Gly	Leu	Ser	Val	Asp	Phe	Ala	Val
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His	Tyr	Gly	Val	Ala	Tyr	Arg	Leu	Ala	Pro	Asp	Pro	Asp	Arg	Glu	Gly
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Lvs	Val	Ile	Phe	Ser	Leu	Ser	Arg	Val	Gly	Ser	Ala	Met	Ala	Met	Ala
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	Leu	Thr	Thr	Phe		Ala	Gly	Ala	Met	Met	Ile	Pro	Ser	Thr	Val
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Leu	Ala	Tvr	Thr	Gln	Leu	Gly	Thr	Phe	Met	Met	Leu	Ile	Met	Суз	Ile
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Ser	Trn	Δla		Ala	Thr	Phe	Phe		Gln	Cvs	Met	Cvs	Arg	Cvs	Leu
001		355					360					365		•	
Glv	Pro		Glv	Thr	Cvs	Gly		Ile	Pro	Leu	Pro	Lvs	Lvs	Leu	Gln
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Cve		Δla	Dhe	Ser	His	Ala	Len	Ser	Thr	Ser		Ser	Asp	Lvs	Glv
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Pro	Lva	Sar	Glu		Glu	His	Glu	Dhe		Glu	f.eu	Glu	Pro		Ala
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Sar	Hie	Sar		Thr	Δla	Pro	Glu		Thr	Thr	Tvr	Glu		Thr	His
Ser	птэ	435	Cys	1111	A.L.	110	440	DyS			•1.	445			
Tle	Cys		Glu	Phe	Dhe	Δen		Gln	Δla	Lvs	Asn		Glv	Met	Pro
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Val 465	450 His	Ala	Ala	Tyr Leu	Asn 470	455	Glu	Leu	Ser Leu	Lys 475	460 Ser	Thr	Glu	ser Val	Asp 480
Val 465 Thr	450 His Gly	Ala Ser	Ala Ala	Tyr Leu 485	Asn 470 Leu	455 Ser Gln	Glu Pro	Leu Pro	Ser Leu 490	Lys 475 Glu	460 Ser Gln	Thr His	Glu Thr	Ser Val 495	Asp 480 Cys
Val 465 Thr	450 His Gly	Ala Ser	Ala Ala Ser	Tyr Leu 485	Asn 470 Leu	455 Ser	Glu Pro	Leu Pro Cys	Ser Leu 490	Lys 475 Glu	460 Ser Gln	Thr His	Glu Thr Ala	Ser Val 495	Asp 480 Cys
Val 465 Thr	450 His Gly Phe	Ala Ser Phe	Ala Ala Ser 500	Tyr Leu 485 Leu	Asn 470 Leu Asn	455 Ser Gln Gln	Glu Pro Arg	Leu Pro Cys 505	Ser Leu 490 Ser	Lys 475 Glu Cys	460 Ser Gln Pro	Thr His Asp	Glu Thr Ala 510	Ser Val 495 Tyr	Asp 480 Cys Lys
Val 465 Thr	450 His Gly Phe	Ala Ser Phe Asn	Ala Ala Ser 500	Tyr Leu 485 Leu	Asn 470 Leu Asn	455 Ser Gln	Glu Pro Arg Ser	Leu Pro Cys 505	Ser Leu 490 Ser	Lys 475 Glu Cys	460 Ser Gln Pro	Thr His Asp Gly	Glu Thr Ala 510	Ser Val 495 Tyr	Asp 480 Cys Lys
Val 465 Thr His	450 His Gly Phe Leu	Ala Ser Phe Asn 515	Ala Ala Ser 500 Tyr	Tyr Leu 485 Leu Gly	Asn 470 Leu Asn Pro	455 Ser Gln Gln His	Glu Pro Arg Ser 520	Leu Pro Cys 505 Cys	Ser Leu 490 Ser Gln	Lys 475 Glu Cys Gln	460 Ser Gln Pro Met	Thr His Asp Gly 525	Glu Thr Ala 510 Asp	Ser Val 495 Tyr Cys	Asp 480 Cys Lys Leu
Val 465 Thr His	450 His Gly Phe Leu His	Ala Ser Phe Asn 515	Ala Ala Ser 500 Tyr	Tyr Leu 485 Leu Gly	Asn 470 Leu Asn Pro	455 Ser Gln Gln His Thr	Glu Pro Arg Ser 520	Leu Pro Cys 505 Cys	Ser Leu 490 Ser Gln	Lys 475 Glu Cys Gln	460 Ser Gln Pro Met Val	Thr His Asp Gly 525	Glu Thr Ala 510 Asp	Ser Val 495 Tyr Cys	Asp 480 Cys Lys Leu
Val 465 Thr His Cys	450 His Gly Phe Leu His 530	Ala Ser Phe Asn 515 Gln	Ala Ala Ser 500 Tyr Cys	Tyr Leu 485 Leu Gly Ser	Asn 470 Leu Asn Pro	455 Ser Gln Gln His Thr 535	Glu Pro Arg Ser 520 Thr	Leu Pro Cys 505 Cys Ser	Ser Leu 490 Ser Gln Ser	Lys 475 Glu Cys Gln Phe	460 Ser Gln Pro Met Val 540	Thr His Asp Gly 525 Gln	Glu Thr Ala 510 Asp	Ser Val 495 Tyr Cys Gln	Asp 480 Cys Lys Leu Asn
Val 465 Thr His Cys	450 His Gly Phe Leu His 530	Ala Ser Phe Asn 515 Gln	Ala Ala Ser 500 Tyr	Tyr Leu 485 Leu Gly Ser	Asn 470 Leu Asn Pro Pro	455 Ser Gln Gln His Thr	Glu Pro Arg Ser 520 Thr	Leu Pro Cys 505 Cys Ser	Ser Leu 490 Ser Gln Ser	Lys 475 Glu Cys Gln Phe	460 Ser Gln Pro Met Val 540	Thr His Asp Gly 525 Gln	Glu Thr Ala 510 Asp	Ser Val 495 Tyr Cys Gln	Asp 480 Cys Lys Leu Asn
Val 465 Thr His Cys Gly 545	450 His Gly Phe Leu His 530 Val	Ala Ser Phe Asn 515 Gln Ala	Ala Ser 500 Tyr Cys Pro	Tyr Leu 485 Leu Gly Ser Leu	Asn 470 Leu Asn Pro Pro Lys 550	455 Ser Gln Gln His Thr 535 Ala	Glu Pro Arg Ser 520 Thr	Leu Pro Cys 505 Cys Ser His	Ser Leu 490 Ser Gln Ser	Lys 475 Glu Cys Gln Phe Ala 555	460 Ser Gln Pro Met Val 540 Val	Thr His Asp Gly 525 Gln Glu	Glu Thr Ala 510 Asp Ile Gly	Ser Val 495 Tyr Cys Gln Phe	Asp 480 Cys Lys Leu Asn Val 560
Val 465 Thr His Cys Gly 545	450 His Gly Phe Leu His 530 Val	Ala Ser Phe Asn 515 Gln Ala	Ala Ser 500 Tyr Cys Pro	Tyr Leu 485 Leu Gly Ser Leu	Asn 470 Leu Asn Pro Pro Lys 550	455 Ser Gln Gln His Thr 535	Glu Pro Arg Ser 520 Thr	Leu Pro Cys 505 Cys Ser His	Ser Leu 490 Ser Gln Ser Gln Pro	Lys 475 Glu Cys Gln Phe Ala 555	460 Ser Gln Pro Met Val 540 Val	Thr His Asp Gly 525 Gln Glu	Glu Thr Ala 510 Asp Ile Gly	Ser Val 495 Tyr Cys Gln Phe Arg	Asp 480 Cys Lys Leu Asn Val 560
Val 465 Thr His Cys Gly 545 His	450 His Gly Phe Leu His 530 Val	Ala Ser Phe Asn 515 Gln Ala Ile	Ala Ser 500 Tyr Cys Pro	Tyr Leu 485 Leu Gly Ser Leu His 565	Asn 470 Leu Asn Pro Pro Lys 550 Ile	455 Ser Gln Gln His Thr 535 Ala His	Glu Pro Arg Ser 520 Thr Thr	Leu Pro Cys 505 Cys Ser His Cys	Ser Leu 490 Ser Gln Ser Gln Pro 570	Lys 475 Glu Cys Gln Phe Ala 555 Cys	460 Ser Gln Pro Met Val 540 Val Leu	Thr His Asp Gly 525 Gln Glu Gln	Glu Thr Ala 510 Asp Ile Gly Gly	Ser Val 495 Tyr Cys Gln Phe Arg 575	Asp 480 Cys Lys Leu Asn Val 560 Val
Val 465 Thr His Cys Gly 545 His	450 His Gly Phe Leu His 530 Val	Ala Ser Phe Asn 515 Gln Ala Ile	Ala Ser 500 Tyr Cys Pro Thr Gly	Tyr Leu 485 Leu Gly Ser Leu His 565	Asn 470 Leu Asn Pro Pro Lys 550 Ile	455 Ser Gln Gln His Thr 535 Ala	Glu Pro Arg Ser 520 Thr Thr	Leu Pro Cys 505 Cys Ser His Cys	Ser Leu 490 Ser Gln Ser Gln Pro 570	Lys 475 Glu Cys Gln Phe Ala 555 Cys	460 Ser Gln Pro Met Val 540 Val Leu	Thr His Asp Gly 525 Gln Glu Gln	Glu Thr Ala 510 Asp Ile Gly Gly Phe	Ser Val 495 Tyr Cys Gln Phe Arg 575	Asp 480 Cys Lys Leu Asn Val 560 Val
Val 465 Thr His Cys Gly 545 His	450 His Gly Phe Leu His 530 Val Pro	Ala Ser Phe Asn 515 Gln Ala Ile	Ala Ser 500 Tyr Cys Pro Thr Gly 580	Tyr Leu 485 Leu Gly Ser Leu His 565 Met	Asn 470 Leu Asn Pro Pro Lys 550 Ile	455 Ser Gln Gln His Thr 535 Ala His	Glu Pro Arg Ser 520 Thr Thr His	Leu Pro Cys 505 Cys Ser His Cys Leu 585	Ser Leu 490 Ser Gln Ser Gln Pro 570 Pro	Lys 475 Glu Cys Gln Phe Ala 555 Cys	460 Ser Gln Pro Met Val 540 Val Leu Asn	Thr His Asp Gly 525 Gln Glu Gln Phe	Glu Thr Ala 510 Asp Ile Gly Gly Phe 590	Ser Val 495 Tyr Cys Gln Phe Arg 575 Leu	Asp 480 Cys Lys Leu Asn Val 560 Val
Val 465 Thr His Cys Gly 545 His	450 His Gly Phe Leu His 530 Val Pro	Ala Ser Phe Asn 515 Gln Ala Ile Ala Gln	Ala Ser 500 Tyr Cys Pro Thr Gly 580	Tyr Leu 485 Leu Gly Ser Leu His 565 Met	Asn 470 Leu Asn Pro Pro Lys 550 Ile	455 Ser Gln Gln His Thr 535 Ala His	Glu Pro Arg Ser 520 Thr Thr His Ser	Leu Pro Cys 505 Cys Ser His Cys Leu 585	Ser Leu 490 Ser Gln Ser Gln Pro 570 Pro	Lys 475 Glu Cys Gln Phe Ala 555 Cys	460 Ser Gln Pro Met Val 540 Val Leu Asn	Thr His Asp Gly 525 Gln Glu Gln Phe	Glu Thr Ala 510 Asp Ile Gly Gly Phe 590	Ser Val 495 Tyr Cys Gln Phe Arg 575 Leu	Asp 480 Cys Lys Leu Asn Val 560 Val
Val 465 Thr His Cys Gly 545 His Lys	450 His Gly Phe Leu His 530 Val Pro Val	Ala Ser Phe Asn 515 Gln Ala Ile Ala Gln 595	Ala Ser 500 Tyr Cys Pro Thr Gly 580 His	Tyr Leu 485 Leu Gly Ser Leu His 565 Met	Asn 470 Leu Asn Pro Lys 550 Ile Gln	455 Ser Gln Gln His Thr 535 Ala His Asn	Glu Pro Arg Ser 520 Thr Thr His Ser Gln 600	Leu Pro Cys 505 Cys Ser His Cys Leu 585 Glu	Ser Leu 490 Ser Gln Pro 570 Pro Lys	Lys 475 Glu Cys Gln Phe Ala 555 Cys	460 Ser Gln Pro Met Val 540 Val Leu Asn Gly	Thr His Asp Gly 525 Gln Glu Gln Phe Lys 605	Glu Thr Ala 510 Asp Ile Gly Gly Phe 590 Thr	Ser Val 495 Tyr Cys Gln Phe Arg 575 Leu Asn	Asp 480 Cys Lys Leu Asn Val 560 Val His
Val 465 Thr His Cys Gly 545 His Lys	450 His Gly Phe Leu His 530 Val Pro Val Ser	Ala Ser Phe Asn 515 Gln Ala Ile Ala Gln 595	Ala Ser 500 Tyr Cys Pro Thr Gly 580 His	Tyr Leu 485 Leu Gly Ser Leu His 565 Met	Asn 470 Leu Asn Pro Lys 550 Ile Gln	455 Ser Gln Gln His Thr 535 Ala His Asn Ala Ile	Glu Pro Arg Ser 520 Thr Thr His Ser Gln 600	Leu Pro Cys 505 Cys Ser His Cys Leu 585 Glu	Ser Leu 490 Ser Gln Pro 570 Pro Lys	Lys 475 Glu Cys Gln Phe Ala 555 Cys	460 Ser Gln Pro Met Val 540 Val Leu Asn Gly	Thr His Asp Gly 525 Gln Glu Gln Phe Lys 605	Glu Thr Ala 510 Asp Ile Gly Gly Phe 590 Thr	Ser Val 495 Tyr Cys Gln Phe Arg 575 Leu Asn	Asp 480 Cys Lys Leu Asn Val 560 Val His
Val 465 Thr His Cys Gly 545 His Lys Pro	450 His Gly Phe Leu His 530 Val Pro Val Ser 610	Ala Ser Phe Asn 515 Gln Ala Ile Ala Gln 595 Leu	Ala Ser 500 Tyr Cys Pro Thr Gly 580 His	Tyr Leu 485 Leu Gly Ser Leu His 565 Met Ile Arg	Asn 470 Leu Asn Pro Lys 550 Ile Gln Gln	455 Ser Gln Gln His Thr 535 Ala His Asn Ala Ile 615	Glu Pro Arg Ser 520 Thr Thr His Ser Gln 600 Glu	Leu Pro Cys 505 Cys Ser His Cys Leu 585 Glu	Ser Leu 490 Ser Gln Ser Gln Pro 570 Pro Lys	Lys 475 Glu Cys Gln Phe Ala 555 Cys Arg Ile	460 Ser Gln Pro Met Val 540 Val Leu Asn Gly Pro 620	Thr His Asp Gly 525 Gln Glu Gln Phe Lys 605 Lys	Glu Thr Ala 510 Asp Ile Gly Gly Phe 590 Thr	Ser Val 495 Tyr Cys Gln Phe Arg 575 Leu Asn	Asp 480 Cys Lys Leu Asn Val 560 Val His Val
Val 465 Thr His Cys Gly 545 His Lys Pro His	450 His Gly Phe Leu His 530 Val Pro Val Ser 610	Ala Ser Phe Asn 515 Gln Ala Ile Ala Gln 595 Leu	Ala Ser 500 Tyr Cys Pro Thr Gly 580 His	Tyr Leu 485 Leu Gly Ser Leu His 565 Met Ile Arg	Asn 470 Leu Asn Pro Lys 550 Ile Gln Gln Ser	455 Ser Gln Gln His Thr 535 Ala His Asn Ala Ile	Glu Pro Arg Ser 520 Thr Thr His Ser Gln 600 Glu	Leu Pro Cys 505 Cys Ser His Cys Leu 585 Glu	Ser Leu 490 Ser Gln Ser Gln Pro 570 Pro Lys	Lys 475 Glu Cys Gln Phe Ala 555 Cys Arg Ile Leu Ser	460 Ser Gln Pro Met Val 540 Val Leu Asn Gly Pro 620	Thr His Asp Gly 525 Gln Glu Gln Phe Lys 605 Lys	Glu Thr Ala 510 Asp Ile Gly Gly Phe 590 Thr	Ser Val 495 Tyr Cys Gln Phe Arg 575 Leu Asn	Asp 480 Cys Lys Leu Asn Val 560 Val His Val Glu
Val 465 Thr His Cys Gly 545 His Lys Pro His	450 His Gly Phe Leu His 530 Val Pro Val Ser 610 Ser	Ala Ser Phe Asn 515 Gln Ala Ile Ala Gln 595 Leu	Ala Ser 500 Tyr Cys Pro Thr Gly 580 His Gln Phe	Tyr Leu 485 Leu Gly Ser Leu His 565 Met Ile Arg Val	Asn 470 Leu Asn Pro Lys 550 Ile Gln Gln Ser Cys 630	455 Ser Gln Gln His Thr 535 Ala His Asn Ala Ile 615 Arg	Glu Pro Arg Ser 520 Thr Thr His Ser Gln 600 Glu Ser	Leu Pro Cys Sos Cys Ser His Cys Leu 585 Glu Glu	Ser Leu 490 Ser Gln Ser Gln Pro 570 Pro Lys Gly	Lys 475 Glu Cys Gln Phe Ala 555 Cys Arg Ile Leu Ser 635	460 Ser Gln Pro Met Val 540 Val Leu Asn Gly Pro 620 Leu	Thr His Asp Gly 525 Gln Glu Gln Phe Lys 605 Lys	Glu Thr Ala 510 Asp Ile Gly Gly Phe 590 Thr Met Lys	Ser Val 495 Tyr Cys Gln Phe Arg 575 Leu Asn Ala	Asp 480 Cys Lys Leu Asn Val 560 Val His Val Glu Cys 640
Val 465 Thr His Cys Gly 545 His Lys Pro His	450 His Gly Phe Leu His 530 Val Pro Val Ser 610 Ser	Ala Ser Phe Asn 515 Gln Ala Ile Ala Gln 595 Leu	Ala Ser 500 Tyr Cys Pro Thr Gly 580 His Gln Phe	Tyr Leu 485 Leu Gly Ser Leu His 565 Met Ile Arg Val	Asn 470 Leu Asn Pro Lys 550 Ile Gln Gln Ser Cys 630	455 Ser Gln Gln His Thr 535 Ala His Asn Ala Ile 615	Glu Pro Arg Ser 520 Thr Thr His Ser Gln 600 Glu Ser	Leu Pro Cys Sos Cys Ser His Cys Leu 585 Glu Glu	Ser Leu 490 Ser Gln Ser Gln Pro 570 Pro Lys His Gly Leu	Lys 475 Glu Cys Gln Phe Ala 555 Cys Arg Ile Leu Ser 635	460 Ser Gln Pro Met Val 540 Val Leu Asn Gly Pro 620 Leu	Thr His Asp Gly 525 Gln Glu Gln Phe Lys 605 Lys	Glu Thr Ala 510 Asp Ile Gly Gly Phe 590 Thr Met Lys	Ser Val 495 Tyr Cys Gln Phe Arg 575 Leu Asn Ala Thr	Asp 480 Cys Lys Leu Asn Val 560 Val His Val Glu Cys 640
Val 465 Thr His Cys Gly 545 His Lys Pro His Pro 625 Cys	450 His Gly Phe Leu His 530 Val Pro Val Ser 610 Ser Asp	Ala Ser Phe Asn S15 Gln Ala Ile Ala Gln 595 Leu Ser	Ala Ser 500 Tyr Cys Pro Thr Gly 580 His Gln Phe	Tyr Leu 485 Leu Gly Ser Leu His 565 Met Ile Arg Val Asn 645	Asn 470 Leu Asn Pro Lys 550 Ile Gln Gln Ser Cys 630 Lys	455 Ser Gln Gln His Thr 535 Ala His Asn Ala Ile 615 Arg	Glu Pro Arg Ser 520 Thr Thr His Ser Gln 600 Glu Ser	Leu Pro Cys Sos Cys Ser His Cys Leu S85 Glu Glu Thr	Ser Leu 490 Ser Gln Ser Gln Pro 570 Pro Lys Gly Leu 650	Lys 475 Glu Cys Gln Phe Ala 555 Cys Arg Ile Leu Ser 635 Cys	460 Ser Gln Pro Met Val 540 Val Leu Asn Gly Pro 620 Leu Lys	Thr His Asp Gly 525 Gln Glu Gln Phe Lys 605 Lys Leu Asn	Glu Thr Ala 510 Asp Ile Gly Gly Phe 590 Thr Met Lys Arg	Ser Val 495 Tyr Cys Gln Phe Arg 575 Leu Asn Ala Thr Asp 655	Asp 480 Cys Lys Leu Asn Val 560 Val His Val Glu Cys 640 Val

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665
            660
Val Glu Leu Ser Leu Ser Gln Thr Asp Ala Ser Val Asn Ser Glu His
                           680
       675
Phe Asn Gln Asn Glu Pro Lys Val Leu Phe Asn His Leu Met Gly Glu
                                           700
                        695
Ala Gly Cys Arg Ser Cys Pro Asn Asn Ser Gln Ser Cys Gly Arg Ile
                                                            720
                   710
                                       715
Val Arg Val Lys Cys Asn Ser Val Asp Cys Gln Met Pro Asn Met Glu
               725
                                    730
Ala Asn Val Pro Ala Val Leu Thr His Ser Glu Leu Ser Gly Glu Ser
                               745
           740
Leu Leu Ile Lys Thr Leu
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<400> 2115
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ttctgggtat tccagaatct ggaatggggg atgcctatcc ccctcctgag cccacctgct
ggtettgggt cettggagee caccaagtee acaaccacet getetgaata gaaagetgae
attgaaccga acagccgcgt cggaggggga tatctgtgga gagctgtgac tgggagccgg
tgtgtgcctt tctgtggtca tttctcgagt cctctgccgg ctgctgccag gtgaaggcat
ctccatgccc agccggtggg cagctggggc gggtggacct ccagcttctg cccgacgggg
ttcagatgac cgagatccta cgggattgcc aatgtgtggg gacggggggc tttcaggggc
gggaaaacat gtccccatcc gtgggaagtg gagccacgtg g
461
<210> 2116
<211> 146
<212> PRT
<213> Homo sapiens
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Met Gly Thr Cys Phe Pro Ala Pro Glu Ser Pro Pro Ser Pro His Ile
                                   10
Gly Asn Pro Val Gly Ser Arg Ser Ser Glu Pro Arg Arg Ala Glu Ala
           20
Gly Gly Pro Pro Ala Pro Ala Ala His Arg Leu Gly Met Glu Met Pro
Ser Pro Gly Ser Ser Arg Gln Arg Thr Arg Glu Met Thr Thr Glu Arg
                        55
                                           60
His Thr Pro Ala Pro Ser His Ser Ser Pro Gln Ile Ser Pro Ser Asp
                                        75
                    70
Ala Ala Val Arg Phe Asn Val Ser Phe Leu Phe Arg Ala Gly Gly Cys
```

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90
Gly Leu Gly Gly Leu Gln Gly Pro Lys Thr Ser Arg Trp Ala Gln Glu
                                                  110
                              105
           100
Gly Asp Arg His Pro Pro Phe Gln Ile Leu Glu Tyr Pro Glu Ala Pro
                                              125
                           120
       115
Ser Gly Arg Glu Gly Gly Val Ser Gly Glu Pro Ala Pro Arg Pro Glu
                      135
   130
Thr Arg
145
<210> 2117
<211> 360
<212> DNA
<213> Homo sapiens
<400> 2117
nnacgcgttg gggagacgac ggtgaccttc ccagcaagct catcgcagga tgaaacaatc
cgcgccagcg ttaagacctt ctcgcgggct gtcaccgccg atctggagaa gtgtggaccg
atcaggtgac actcgcggta gactgaatag atgcctgagt ctgaagacac tgtgtggctg
acccaagagg cettegataa geteaceeag gagetggagt acctcaaagg egaaggeege
accetcatte ccaacaagat tecegacece cetteegaag eceacette teagaacege
ggctaccatg ccgcccgtga ggagcagggg caggccgagg cccgcatccg tcaactcgag
360
<210> 2118
<211> 70
<212> PRT
<213> Homo sapiens
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Met Pro Glu Ser Glu Asp Thr Val Trp Leu Thr Gln Glu Ala Phe Asp
                                   10
Lys Leu Thr Gln Glu Leu Glu Tyr Leu Lys Gly Glu Gly Arg Thr Val
           20
                                25
                                                    30
Ile Ala Asn Lys Ile Ala Asp Ala Arg Ser Glu Gly Asp Leu Ser Glu
                           40
        35
Asn Gly Gly Tyr His Ala Ala Arg Glu Glu Gln Gly Gln Ala Glu Ala
                                           60
  50
Arg Ile Arg Gln Leu Glu
<210> 2119
<211> 465
<212> DNA
<213> Homo sapiens
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nacgogtgaa gggegegtgt eggeetetea etggegeage etgeaetgee getgeegeet
60
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cgccccgccc ttgccttggc gttgtctctg gcactgtggc ggactgacca cggcccgggc
atgggctgca agggagacgc gagcggagtt tgctataaaa tgggagttct ggttgtactc
actgttctgt ggctgttctc ctcagtaaag gccgactcaa aagccattac aacctctctt
240
acaacaaaat ggttttccac tccattgttg ttagaagcca gtgagttttt agcagaagac
agtcaagaga aattttggaa ttttgtagaa gccagtcaaa atattggatc atcagatcat
gacggtaccg attattccta ctatcatgca atattggagg ctgcatttca gtttctgtca
cccctccagc agaatttgtt taaattttgt ctgtcccttc acgcg
465
<210> 2120
<211> 115
<212> PRT
<213> Homo sapiens
<400> 2120
Met Gly Cys Lys Gly Asp Ala Ser Gly Val Cys Tyr Lys Met Gly Val
                                    10
                                                        15
1
                 5
Leu Val Val Leu Thr Val Leu Trp Leu Phe Ser Ser Val Lys Ala Asp
                                25
                                                    30
            20
Ser Lys Ala Ile Thr Thr Ser Leu Thr Thr Lys Trp Phe Ser Thr Pro
                            40
                                                45
Leu Leu Glu Ala Ser Glu Phe Leu Ala Glu Asp Ser Gln Glu Lys
    50
                                            60
                        55
Phe Trp Asn Phe Val Glu Ala Ser Gln Asn Ile Gly Ser Ser Asp His
                    70
Asp Gly Thr Asp Tyr Ser Tyr Tyr His Ala Ile Leu Glu Ala Ala Phe
                85
                                   90
Gln Phe Leu Ser Pro Leu Gln Gln Asn Leu Phe Lys Phe Cys Leu Ser
           100
                                105
Leu His Ala
       115
<210> 2121
<211> 336
<212> DNA
<213> Homo sapiens
<400> 2121
ccggacaagg tcaatggaat gaaaacctcc cggccgacag acaatagtat aaatgttaca
tgtggtcctc cttatgaaac taatggccct aaaacctttt acattttggt agtcagaagt
ggaggttctt ttgttacaaa atacaacaag acaaactgtc agttttatgt agataatctc
tactattcaa ctgactatga gtttctggtc tcttttcaca atggagtgta cgagggagat
teagttataa gaaatgagte aacaaatttt aatgetaaag ceetgattat atteetggtg
300
```

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tttctgatta ttgtgacatc aatagccttg cttgtt
336
<210> 2122
<211> 112
<212> PRT
<213> Homo sapiens
<400> 2122
Pro Asp Lys Val Asn Gly Met Lys Thr Ser Arg Pro Thr Asp Asn Ser
1
Ile Asn Val Thr Cys Gly Pro Pro Tyr Glu Thr Asn Gly Pro Lys Thr
                                25
Phe Tyr Ile Leu Val Val Arg Ser Gly Gly Ser Phe Val Thr Lys Tyr
                            40
Asn Lys Thr Asn Cys Gln Phe Tyr Val Asp Asn Leu Tyr Tyr Ser Thr
Asp Tyr Glu Phe Leu Val Ser Phe His Asn Gly Val Tyr Glu Gly Asp
Ser Val Ile Arg Asn Glu Ser Thr Asn Phe Asn Ala Lys Ala Leu Ile
                                    90
Ile Phe Leu Val Phe Leu Ile Ile Val Thr Ser Ile Ala Leu Leu Val
<210> 2123
<211> 426
<212> DNA
<213> Homo sapiens
<400> 2123
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cagcaactga ccgacgaact ggaagcgatg ctctgcgccg ccacaggtta tgacgcgatc
tecetgeage egaacgetgg etceeaggge gagtacgeeg gtetgetgge gateegeget
taccaccaga gccgtggcga tgagcgtcgc gacatctgcc tgattccgtc ctctgcccac
ggcaccaacc cggcaaccgc caacatggcc ggcatgcgcg tggtcgtgac cgcttgcgac
300
gecegeggea aegtegacat egaagacetg egegecaagg etategagea eegegaacae
ctcgcggcgc tgatgatcac ctacccgtcg acccacggcg tgttcgaaga aggcatccgc
420
gagatc
426
<210> 2124
<211> 142
<212> PRT
<213> Homo sapiens
<400> 2124
Asn Trp Ala Glu Phe Gly Asn Leu His Pro Phe Ala Pro Ala Glu Gln
```

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10
                5
Ser Ala Gly Tyr Gln Gln Leu Thr Asp Glu Leu Glu Ala Met Leu Cys
                             25
          20
Ala Ala Thr Gly Tyr Asp Ala Ile Ser Leu Gln Pro Asn Ala Gly Ser
                          40
       35
Gln Gly Glu Tyr Ala Gly Leu Leu Ala Ile Arg Ala Tyr His Gln Ser
                                          60
                       55
Arg Gly Asp Glu Arg Arg Asp Ile Cys Leu Ile Pro Ser Ser Ala His
                                       75
                   70
Gly Thr Asn Pro Ala Thr Ala Asn Met Ala Gly Met Arg Val Val
                                   90
              85
Thr Ala Cys Asp Ala Arg Gly Asn Val Asp Ile Glu Asp Leu Arg Ala
                              105
Lys Ala Ile Glu His Arg Glu His Leu Ala Ala Leu Met Ile Thr Tyr
                           120
      115
Pro Ser Thr His Gly Val Phe Glu Glu Gly Ile Arg Glu Ile
                      135
  130
<210> 2125
<211> 285
<212> DNA
<213> Homo sapiens
<400> 2125
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acagtcaagc ccaatatggt tatgttacct attcaaaaca caagaggttc aagattggtt
ctaaaggcgg ctgaagacgc ggcaccaccg gctgtcaccg ttgaagcggc caaggaagag
aagccgaagc caccaccaat tggacctaag agaggagcca aggtgagaat tcttaggaag
gagtcatact ggttcaaagg agtgggatca gttgtgactg ttgat
285 .
<210> 2126
<211> 95
<212> PRT
<213> Homo sapiens
<400> 2126
Xaa Met Ala Ser Ala Ala Ser Ser Phe Val Val Thr Pro Asn Val Thr
                                   10
Ser Asn Thr Thr Thr Val Lys Pro Asn Met Val Met Leu Pro Ile Gln
            20
Asn Thr Arg Gly Ser Arg Leu Val Leu Lys Ala Ala Glu Asp Ala Ala
                            40
Pro Pro Ala Val Thr Val Glu Ala Ala Lys Glu Glu Lys Pro Lys Pro
                       55
Pro Pro Ile Gly Pro Lys Arg Gly Ala Lys Val Arg Ile Leu Arg Lys
                    70
Glu Ser Tyr Trp Phe Lys Gly Val Gly Ser Val Val Thr Val Asp
                                    90
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<210> 2127
<211> 454
<212> DNA
<213> Homo sapiens
<400> 2127
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gegacgeata ttecagggea ettgteacea gteatgeeat tgggtaceat gaacceatge
atgcagtact gcatgatgca acaggggctt gccagcttga tggcgtgtcc gtccctgatg
ctgcagcaac tgttggcctt accgcttcag acgatgccag tgatgatgcc acagatgatg
acgcctaaca tgatgtcacc attgatgatg ccgagcatga tgtcaccaat ggtcttgccg
agcatgatgt cgcaaatgat gatgccacaa tgtcactgcg acgccgtctc gcagattatg
ctgcaacagc agttaccatt catgttcaac ccaatggcca tgacgattcc acccatgttc
ttacagcaac cctttgttgg tgctgcattc taga
<210> 2128
<211> 150
<212> PRT
<213> Homo sapiens
<400> 2128
Met Ala Ala Lys Met Leu Ala Leu Phe Ala Leu Leu Ala Leu Cys Ala
Ser Ala Thr Ser Ala Thr His Ile Pro Gly His Leu Ser Pro Val Met
                                                  30
                               25
           20
Pro Leu Gly Thr Met Asn Pro Cys Met Gln Tyr Cys Met Met Gln Gln
                           40
                                               45
      35
Gly Leu Ala Ser Leu Met Ala Cys Pro Ser Leu Met Leu Gln Gln Leu
                                          60
                      55
   50
Leu Ala Leu Pro Leu Gln Thr Met Pro Val Met Met Pro Gln Met Met
                   70
                                       75
Thr Pro Asn Met Met Ser Pro Leu Met Met Pro Ser Met Met Ser Pro
               8.5
                                   90
Met Val Leu Pro Ser Met Met Ser Gln Met Met Pro Gln Cys His
                                                  110
           100
                              105
Cys Asp Ala Val Ser Gln Ile Met Leu Gln Gln Gln Leu Pro Phe Met
                           120
       115
Phe Asn Pro Met Ala Met Thr Ile Pro Pro Met Phe Leu Gln Gln Pro
                      135
                                           140
Phe Val Gly Ala Ala Phe
                  150
145
<210> 2129
<211> 354
<212> DNA
<213> Homo sapiens
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<400> 2129
acgcgtgact tggtgaacaa acccatatee ateaccect teggtgttga tacggaaata
ctcacgccct ttgacaagcg gcgtgatgcg aacggcggtg acggggtggt gcgcatcggg
actatcaagg ctctccactc caaatatggg atcggtgaac tcatccgtgc cttcagtcgg
180
gtccatgatg aacggcctaa taccgtcctt cgtatctggg gcggcggccc agacgagaat
cccctcaagg tettggeteg cegtettgte ceggaeggtt eggtggagtt tegeggtgee
attgatcatt ctgaggtcag aaatgccttg ggtagtttgg acatctttgc cgcc
<210> 2130
<211> 118
<212> PRT
<213> Homo sapiens
<400> 2130
Thr Arg Asp Leu Val Asn Lys Pro Ile Ser Ile Thr Pro Phe Gly Val
                                    10
Asp Thr Glu Ile Leu Thr Pro Phe Asp Lys Arg Arg Asp Ala Asn Gly
                                25
            20
Gly Asp Gly Val Val Arg Ile Gly Thr Ile Lys Ala Leu His Ser Lys
                                                45
       35
                            40
Tyr Gly Ile Gly Glu Leu Ile Arg Ala Phe Ser Arg Val His Asp Glu
                                            60
                        55
   50
Arg Pro Asn Thr Val Leu Arg Ile Trp Gly Gly Gly Pro Asp Glu Asn
                                        75
65
                    70
Pro Leu Lys Val Leu Ala Arg Arg Leu Val Pro Asp Gly Ser Val Glu
                                    90
Phe Arg Gly Ala Ile Asp His Ser Glu Val Arg Asn Ala Leu Gly Ser
                                105
            100
Leu Asp Ile Phe Ala Ala
       115
<210> 2131
<211> 324
<212> DNA
<213> Homo sapiens
<400> 2131
gcatcgcggc cattggttat gtgtgcctat tccattggtt atgtggaagg ttgggatcag
ccagacagtc attatgatgg tttgttacag ctgggcgagt ggggctttcg aatcaatgac
ctgatgaaga cggtagaggg cgcggcaggg tgcattgagt attatgaaat gctcaacgaa
180
caacgccccg acttgtctta tgacatagac ggtattgttt ataaagttga tcagattgac
ctgcaagaag agcttggttt tattgctcgt gcgccacgct gggcaattgc tcgaaaattt
300
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cctgctcaag aagaagttac gcgt
324
<210> 2132
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<213> Homo sapiens
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Gly Trp Asp Gln Pro Asp Ser His Tyr Asp Gly Leu Leu Gln Leu Gly
                               25
Glu Trp Gly Phe Arg Ile Asn Asp Leu Met Lys Thr Val Glu Gly Ala
                           40
Ala Gly Cys Ile Glu Tyr Tyr Glu Met Leu Asn Glu Gln Arg Pro Asp
                      55
Leu Ser Tyr Asp Ile Asp Gly Ile Val Tyr Lys Val Asp Gln Ile Asp
                                     75
Leu Gln Glu Glu Leu Gly Phe Ile Ala Arg Ala Pro Arg Trp Ala Ile
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               85
Ala Arg Lys Phe Pro Ala Gln Glu Glu Val Thr Arg
                               105
<210> 2133
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<212> DNA
<213> Homo sapiens
<400> 2133
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gtggctgtct ttagaggacc cggcgaactt ttcctgcttt ttcccacttg ctccatcaca
tacatcacat caccaacacc catcacatac atacacagtc atgaacggcc atcaggccac
accagattac ategetgtgg atecaaceet geatttteet geeeeteett tactgegagt
gtcacctcta cccggaaagg tcttcaacct ccaagtttcc cagtaattta tt
292
<210> 2134
<211> 93
<212> PRT
<213> Homo sapiens
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Met Val Leu His Asp Met Asn Lys Phe Phe Leu Thr Leu Asn Ser Leu
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                             10
Val Ala Val Phe Arg Gly Pro Gly Glu Leu Phe Leu Leu Phe Pro Thr
                               25
           20
Cys Ser Ile Thr Tyr Ile Thr Ser Pro Thr Pro Ile Thr Tyr Ile His
                                              45
       35
                           40
Ser His Glu Arg Pro Ser Gly His Thr Arg Leu His Arg Cys Gly Ser
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60
                        55
    50
Asn Pro Ala Phe Ser Cys Pro Ser Phe Thr Ala Ser Val Thr Ser Thr
                                        75
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Arg Lys Gly Leu Gln Pro Pro Ser Phe Pro Val Ile Tyr
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gagetggeeg agegeggeat taacceggag geetggagee egetgggeea gtegaaggae
ctcgacaatc ccgtcctcac cgatatttcc aaggcgactg gaaagacgcc tgcccaggtg
gtcattcgct ggcacctgca gatcggcaac gtggtattcc ccaagtcggt gacaccatca
300
cqaattgccg agaactttga tgtgttcgat ttcgagctgt ctgacgagca gatcgccgca
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ttctgcaaca ataaccggt
439
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<211> 139
<212> PRT
<213> Homo sapiens
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1
Ile Glu Gly Ala Thr Pro Ser Val Asp Gln Ile Glu Met His Pro Ser
                                25
            20
Phe Asn Gln Ala Thr Phe Arg Ala Glu Leu Ala Glu Arg Gly Ile Asn
                            40
Pro Glu Ala Trp Ser Pro Leu Gly Gln Ser Lys Asp Leu Asp Asn Pro
Val Leu Thr Asp Ile Ser Lys Ala Thr Gly Lys Thr Pro Ala Gln Val
                                        75
                    70
Val Ile Arg Trp His Leu Gln Ile Gly Asn Val Val Phe Pro Lys Ser
                                    90
               85
Val Thr Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Phe Asp Phe Glu
                                                    110
                                105
           100
Leu Ser Asp Glu Gln Ile Ala Ala Ile Asp Gly Leu Asp His Gly Asn
        115
                            120
Arg Leu Gly Gly Asp Pro Ser Thr Ala Asp Phe
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    130
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120
aagaaggagg agctgaagga gttccagctt ctgctcgcca ataaagcgca ctccaggagc
180
tetteeggtg agacaceege teagecagag aagacgagtg geatggaggt ggeetegtae
ctggtggctc agtatgggga gcagcgggcc tgggacctag ccctccatac ctgggagcag
atggggctga ggtcactgtg cgcccaagcc
330
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<211> 86
<212> PRT
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Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu
                                  10
1
                5
Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala
                              25
                                                  30
His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr
                           40
       35
Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln
                       55
                                          60
Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg
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Ser Leu Cys Ala Gln Ala
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<211> 433
<212> DNA
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gtgaacaagc tggcgagtac catcgcccag tacaacgatc agatttccaa agtcaccacc
180
gagetggteg ggacecaggt ggtecagege ggttegagtt atgaegteta tateggeage
ggtcagegec tggtgatggg caacageaec aacaceetgt eegeagtgee gagcaaggae
300
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gaccegagee agteggeett geagetggat egeggeacea geacegtega tateacetee
acggtgaccg gtggcgagat cggtggtctg ctgcgctatc gcagcgatgt gctcgacccg
tcgatcaacg cgt
433
<210> 2140
<211> 144
<212> PRT
<213> Homo sapiens
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Glu Gln Leu Ser Ala Gln Asn Thr Gly Ile Asn Ser Asn Leu Ser Asp
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1
Met Ala Gly Gln Val Asn Lys Leu Ala Ser Thr Ile Ala Gln Tyr Asn
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                                25
                                                    30
Asp Gln Ile Ser Lys Val Thr Thr Ala Ala Gly Ala Pro Asn Asp Leu
                            40
Leu Asp Gln Arg Ser Glu Ala Val Arg Gln Leu Ser Glu Leu Val Gly
                        55
                                            60
Thr Gln Val Val Gln Arg Gly Ser Ser Tyr Asp Val Tyr Ile Gly Ser
                                        75
Gly Gln Arg Leu Val Met Gly Asn Ser Thr Asn Thr Leu Ser Ala Val
                85
                                    90
Pro Ser Lys Asp Asp Pro Ser Gln Ser Ala Leu Gln Leu Asp Arg Gly
            100
                                105
                                                    110
Thr Ser Thr Val Asp Ile Thr Ser Thr Val Thr Gly Gly Glu Ile Gly
                            120
                                                125
Gly Leu Leu Arg Tyr Arg Ser Asp Val Leu Asp Pro Ser Ile Asn Ala
                        135
<210> 2141
<211> 426
<212> DNA
<213> Homo sapiens
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120
ggtgacccaa ttgcttgtca tgttaaatat cgtaaaggta ttaacaaagg cttgatgaaa
180
atcctgtcta aaatgggtat ttcaacgatt gcctcttatc gtggtgcgca attgtttgaa
geggttgget tggatactaa agtggtegae etttgtttea aaggegttge aagtegtate
300
aaaggtgete gttttgaaga tttecagegt gateaageaa egattgeeaa taatgettgg
aagttacgta aacctattca acagggcggt tatcttaaat acgtacatga ctctgagtat
420
cacgcg
426
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<210> 2142
<211> 142
<212> PRT
<213> Homo sapiens
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Xaa Tyr Pro Cys Ser Asp Pro His Gln Phe Ala Val Leu Leu Gly Phe
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1
Gly Ala Thr Ala Val Tyr Pro Tyr Leu Ser Phe Arg Leu Ile Asn Asp
                               25
           20
Met Val Asp Lys Gly Glu Val Leu Gly Asp Pro Ile Ala Cys His Val
                                              45
                           40
       35
Lys Tyr Arg Lys Gly Ile Asn Lys Gly Leu Met Lys Ile Leu Ser Lys
                       55
Met Gly Ile Ser Thr Ile Ala Ser Tyr Arg Gly Ala Gln Leu Phe Glu
Ala Val Gly Leu Asp Thr Lys Val Val Asp Leu Cys Phe Lys Gly Val
                                   90
Ala Ser Arg Ile Lys Gly Ala Arg Phe Glu Asp Phe Gln Arg Asp Gln
                              105
           100
Ala Thr Ile Ala Asn Asn Ala Trp Lys Leu Arg Lys Pro Ile Gln Gln
                 120
                                               125
Gly Gly Tyr Leu Lys Tyr Val His Asp Ser Glu Tyr His Ala
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<210> 2143
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<212> DNA
<213> Homo sapiens
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cttctcctgc ctactgcgtg cgctgatgat gcgcaggcgc ccgttgtcga taacctcggg
180
acggtcctca gcccctccaa ctccctcatt cgcgagccgg cgaattcgtc agtcaacggg
acgeteaaga geacatatga gtaceteegg eteategaeg gteaegatet accegaegae
gatggctacg ctcatgatca tctggtcgcg gctttgcgcc cgtatttggt gaatggtgga
gacagtegge aggeceaegt cacecaaete atggeggegt catecetgaa aaceeteaae
gcgttgtccg acaaggagag atcagaggtc gacaaacgta cccgcctgcc gaagggctgc
atcacgagaa agacggtgat gacggatctg cccatcgcga cgatgaggcg ggagatcggc
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gctcggtggg cgatgcaggc gctggccagt gccgacctat tcagcaatgc taaggacgcc
660
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gagaaatggg ggtgggagtc gatctcggac gggtatttgc gccatctcga gacctacagt
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cgttcccagt tgcaacgcat cggcgacagt ctcgcggatg cgccatatcc gaggaaggac
840
cttggtccgg cgctcattcg caatggaaag ccggtcaagg acaagtgcag tatcgaatcg
gcgtacctgt tgaggtattc cgggaattgg gcgtggtgac atgacggttt cttggcaagg
tgtgaccaag acattcccct cgggcgattc cgcgcgtggg gggtgcac
1008
<210> 2144
<211> 307
<212> PRT
<213> Homo sapiens
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Met Phe Thr Gly Asp Ala Val Val Ile Val Glu Val Ser Gln Leu Cys
                        10
               5
His Ile Val Arg Ser Met Ser Phe Gln Arg Phe Leu Ala Gly Val Ala
                                                30
                              25
           20
Ala Ile Leu Leu Leu Pro Thr Ala Cys Ala Asp Asp Ala Gln Ala
                                             45
                          40
       35
Pro Val Val Asp Asn Leu Gly Thr Val Leu Ser Pro Ser Asn Ser Leu
                                         60
                      55
Ile Arg Glu Pro Ala Asn Ser Ser Val Asn Gly Thr Leu Lys Ser Thr
                                      75
                   70
Tyr Glu Tyr Leu Arg Leu Ile Asp Gly His Asp Leu Pro Asp Asp Asp
                                 90
               85
Gly Tyr Ala His Asp His Leu Val Ala Ala Leu Arg Pro Tyr Leu Val
                                               110
                             105
          100
Asn Gly Gly Asp Ser Arg Gln Ala His Val Thr Gln Leu Met Ala Ala
                        120
Ser Ser Leu Lys Thr Leu Asn Ala Leu Ser Asp Lys Glu Arg Ser Glu
                      135
                                        140
   130
Val Asp Lys Arg Thr Arg Leu Pro Lys Gly Cys Ile Thr Arg Lys Thr
                                     155
                 150
145
Val Met Thr Asp Leu Pro Ile Ala Thr Met Arg Arg Glu Ile Gly Leu
                                 170
                                                      175
Ser Asn Asp Gly Leu Cys Leu Thr Pro Trp Lys Val Lys Thr Thr Ser
                                                 190
                              185
           180
Ser Glu Glu Ala Arg Trp Ala Met Gln Ala Leu Ala Ser Ala Asp Leu
                                            205
                          200
Phe Ser Asn Ala Lys Asp Ala Glu Lys Trp Gly Trp Glu Ser Ile Ser
                                        220
                      215
   210
Asp Gly Tyr Leu Arg His Leu Glu Thr Tyr Ser Gly Pro Ser Thr Thr
                 230
                                     235
Ile Ala Met Ala Leu Ser Ala Ala Asn Thr Val Ser Thr Leu Ser Arg
                                   250
               245
Ser Gln Leu Gln Arg Ile Gly Asp Ser Leu Ala Asp Ala Pro Tyr Pro
                              265
           260
Arg Lys Asp Leu Gly Pro Ala Leu Ile Arg Asn Gly Lys Pro Val Lys
```

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275
                           280
Asp Lys Cys Ser Ile Glu Ser Ala Tyr Leu Leu Arg Tyr Ser Gly Asn
                      295
                                          300
  290
Trp Ala Trp
305
<210> 2145
<211> 389
<212> DNA
<213> Homo sapiens
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atgacaaccc ttgaacaatc attatctcaa attcccgcat tttcgattat tcatgaacat
ttatttagct cggcccagcc ttctgctgaa caactaaaat tgattaaaga gtttggttgt
agcacagtca ttaaccttgc tttaactaat gcttcaaatc atcttgagaa tgaagaccgt
atttgtttag accttggttt aaattatatt catattccaa ttgattggga gatgccttct
getgageagt gettattagt tttagatttg attgateatt tagtgeaaaa tgaaattgtt
360
tggatacatt gcgccaaaaa taaacgcgt
389
<210> 2146
<211> 109
<212> PRT
<213> Homo sapiens
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Met Thr Thr Leu Glu Gln Ser Leu Ser Gln Ile Pro Ala Phe Ser Ile
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Ile His Glu His Leu Phe Ser Ser Ala Gln Pro Ser Ala Glu Gln Leu
                                                   30
                               25
          20
Lys Leu Ile Lys Glu Phe Gly Cys Ser Thr Val Ile Asn Leu Ala Leu
                                               45
                           40
Thr Asn Ala Ser Asn His Leu Glu Asn Glu Asp Arg Ile Cys Leu Asp
                       55
                                           60
Leu Gly Leu Asn Tyr Ile His Ile Pro Ile Asp Trp Glu Met Pro Ser
                                       75
                   70
Ala Glu Gln Cys Leu Leu Val Leu Asp Leu Ile Asp His Leu Val Gln
               85
Asn Glu Ile Val Trp Ile His Cys Ala Lys Asn Lys Arg
                              105
           100
<210> 2147
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<212> DNA
<213> Homo sapiens
<400> 2147
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acatgtgccc agcagetgtg gtgtcccggc cagccctgtc tcccacctgc cacgtgtgtg
geggaggeca egtteegega gggteeeece geegegttea gegggeacaa egegt
235
<210> 2148
<211> 78
<212> PRT
<213> Homo sapiens
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Leu Pro Ala Gly Cys Val Ser Glu Asp Met Cys Ser Pro Asp Pro Cys
Phe Asn Gly Gly Thr Cys Leu Val Thr Trp Asn Asp Phe His Cys Thr
                                25
            20
Cys Pro Ala Asn Phe Thr Gly Pro Thr Cys Ala Gln Gln Leu Trp Cys
                                                45
        35
Pro Gly Gln Pro Cys Leu Pro Pro Ala Thr Cys Val Ala Glu Ala Thr
                        55
    50
Phe Arg Glu Gly Pro Pro Ala Ala Phe Ser Gly His Asn Ala
                    70
                                        75
<210> 2149
<211> 1474
<212> DNA
<213> Homo sapiens
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caacacgtgg gagtaagact teteetgete tttgecagtg gtetgaggtg atgaaccace
180
ctggcttggt gtgctgtgtc cagcaaacta caggggtgcc gctggtagtt atggtgaaac
cagacacttt tcttatccac gagattaaga ctcttcctgc taaagcgaag atccaagaca
tggttgctat taggcacacg gcctgcaatg agcagcagcg gacaacaatg attctgctgt
gtgaggatgg cagcctgcgc atttacatgg ccaacgtgga gaacacctcc tactggctgc
agccatecet geageceage agtgteatea geateatgaa geetgttega aagegeaaaa
480
cagctacaat cacaaccong cacgtctage caggtgactt tececcattga ettttttgaa
cacaaccago agotgacaga tgtggagttt ggtggtaacg acctootaca ggtotataat
gcacaacaga taaaacaccg gctgaattcc actggcatgt atgtggccaa caccaagccc
660
```

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qqaqqcttca ccattgagat tagtaacaac aatagcacta tggtgatgac aggcatgcgg
atccagattg ggactcaagc aatagaacgg gccccgtcat atatcgagat cttcggcaga
780
actatgeage teaacetgag tegeteaege tggtttgaet teecetteae cagagaagaa
qccctgcagg ctgataagaa gctgaacctc ttcattgggg cctcggtgga tccagcaggt
900
gtcaccatga tagatgctgt aaaaatttat ggcaagacta aggagcagtt tggctggcct
gatgagecee cagaagaatt ceettetgee tetgteagea acatetgeee tteaaatetg
1020
aaccagagca acggcactgg agatagcgac tcagctgccc ccactacgac cagtggaact
1080
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1140
ccaatcatcg agaaggagag aaacaagaat gctgctcagg agctggccac tttgctgttg
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1260
accageeget eggeetacca cageeacaag gtaactgtte teteagggaa aggaaattge
1320
agtgctgaca gggaatcaaa taagttagct cttcattgta aagcaacagc acagcaaagt
13B0
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attctcaagt gccactcaaa actgagggta agcc
1474
<210> 2150
<211> 312
<212> PRT
<213> Homo sapiens
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Ser Leu Phe Glu Ser Ala Lys Gln Leu Gln Ser Gln Pro Xaa Thr Ser
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Ser Gln Val Thr Phe Pro Ile Asp Phe Phe Glu His Asn Gln Gln Leu
                                25
            20
Thr Asp Val Glu Phe Gly Gly Asn Asp Leu Leu Gln Val Tyr Asn Ala
       35
                            40
                                                45
Gln Gln Ile Lys His Arg Leu Asn Ser Thr Gly Met Tyr Val Ala Asn
                        55
Thr Lys Pro Gly Gly Phe Thr Ile Glu Ile Ser Asn Asn Asn Ser Thr
                                        75
65
                    70
Met Val Met Thr Gly Met Arg Ile Gln Ile Gly Thr Gln Ala Ile Glu
                                    90
Arg Ala Pro Ser Tyr Ile Glu Ile Phe Gly Arg Thr Met Gln Leu Asn
           100
                                105
                                                    110
Leu Ser Arg Ser Arg Trp Phe Asp Phe Pro Phe Thr Arg Glu Glu Ala
                                                125
                            120
Leu Gln Ala Asp Lys Lys Leu Asn Leu Phe Ile Gly Ala Ser Val Asp
                        135
                                            140
Pro Ala Gly Val Thr Met Ile Asp Ala Val Lys Ile Tyr Gly Lys Thr
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150
                                        155
145
Lys Glu Gln Phe Gly Trp Pro Asp Glu Pro Pro Glu Glu Phe Pro Ser
               165
                                  170
Ala Ser Val Ser Asn Ile Cys Pro Ser Asn Leu Asn Gln Ser Asn Gly
                                                   190
                               185
           180
Thr Gly Asp Ser Asp Ser Ala Ala Pro Thr Thr Thr Ser Gly Thr Val
                                               205
                           200
Leu Glu Arg Leu Val Val Ser Ser Leu Glu Ala Leu Glu Ser Cys Phe
                       215
                                            220
   210
Ala Val Gly Pro Ile Ile Glu Lys Glu Arg Asn Lys Asn Ala Ala Gln
                   230
                                        235
225
Glu Leu Ala Thr Leu Leu Ser Leu Pro Ala Pro Ala Ser Val Gln
                                   250
               245
Gln Gln Ser Lys Ser Leu Leu Ala Ser Leu His Thr Ser Arg Ser Ala
                               265
           260
Tyr His Ser His Lys Val Thr Val Leu Ser Gly Lys Gly Asn Cys Ser
                           280
       275
Ala Asp Arg Glu Ser Asn Lys Leu Ala Leu His Cys Lys Ala Thr Ala
   290
                       295
                                          300
Glm Glm Ser Lys Val Glu Gly Gly
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305
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<212> DNA
<213> Homo sapiens
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240
gacgcgatca ttctcgggcg cctgtttcag gtgatgttcg acgcaggcgt ggtggtggtc
tgcacctcca atctgccgcc ggatcagctg tatgccgacg gcttcaaccg cgaccgcttc
360
ctgccggcga tcaccgcgat caaacagcac atgcaagtgg tcgcggtgaa tggcgcggaa
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ggtagcgcgt tgagccaggt gttcgacgcg t
511
<210> 2152
<211> 170
<212> PRT
<213> Homo sapiens
<400> 2152
Ala Gly Val Tyr Leu Trp Gly Pro Val Gly Arg Gly Lys Thr Trp Leu
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10
Met Asp Gln Phe His Gln Ser Leu Xaa Gly Cys Arg Arg Xaa Arg Gln
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                               25
His Phe His His Phe Met Gly Trp Val His Gln Arg Ser Phe Gln Leu
Thr Gly Ile Ala Asp Pro Leu Arg Ala Leu Ala Arg Glu Leu Ala Ala
                       55
Glu Val Arg Val Leu Cys Phe Asp Glu Leu Phe Val Asn Asp Ile Gly
                                       75
                   70
Asp Ala Ile Ile Leu Gly Arg Leu Phe Gln Val Met Phe Asp Ala Gly
               85
                                  90
Val Val Val Cys Thr Ser Asn Leu Pro Pro Asp Gln Leu Tyr Ala
                               105
           100
Asp Gly Phe Asn Arg Asp Arg Phe Leu Pro Ala Ile Thr Ala Ile Lys
                                               125
                           120
Gln His Met Gln Val Val Ala Val Asn Gly Ala Glu Asp His Arg Leu
                       135
                                           140
His Pro Gly Ala Ile Glu Gln Arg Tyr Trp Val Ala Leu Pro Glu Gln
                   150
                                       155
Gly Ser Ala Leu Ser Gln Val Phe Asp Ala
               165
<210> 2153
<211> 528
<212> DNA
<213> Homo sapiens
<400> 2153
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420
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528
<210> 2154
<211> 96
<212> PRT
<213> Homo sapiens
<400> 2154
Met Ser Val Asp Pro Gln His Leu Leu Arg Glu Leu Phe Ala Thr Ala
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Ile Asp Ala Ala His Pro Arg His Val Leu Glu Pro Tyr Leu Pro Ala
                              25
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Asp Arg Thr Gly Arg Val Ile Val Ile Gly Pro Gly Lys Thr Ala Pro
                          40
                                              45
      35
Ala Met Ala Leu Val Val Glu Asn Gly Trp Gln Gly Glu Val Thr Gly
                                         60
                   55
Leu Val Val Thr Arg Tyr Gly His Gly Ala Pro Cys Lys Lys Ile Glu
65
                70
                                     75
Val Val Glu Ala Ala His Pro Val Pro Asp Ala Ala Gly Leu Ala Val
                                  90
               85
<210> 2155
<211> 297
<212> DNA
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240
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297
<210> 2156
<211> 91
<212> PRT
<213> Homo sapiens
<400> 2156
Met Pro Arg Arg Tyr Phe Glu Ala Leu Leu Gln Glu Phe Gly Pro Asp
                                 10
Cys Glu Val Leu Thr Val Thr Asp Ser Glu Gly Asn Pro Leu Ser Ser
        20
                              25
                                           30
Val Leu Ser Phe Tyr Phe Arg Asp Glu Val Leu Pro Tyr Tyr Ala Gly
                                             45
                          40
      35
Asp Ala Val Ala Ala Arg Glu Leu Ala Ala Asn Asp Phe Lys Tyr Trp
                                          60
                      55
Glu Leu Met Arg Arg Ala Cys Ala Arg Gly Leu Lys Val Phe Asp Tyr
                   70
Gly Arg Ser Lys Gln Gly Thr Gly Ser Tyr Ala
<210> 2157
<211> 711
<212> DNA
<213> Homo sapiens
<400> 2157
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naccgagata acgaggtcgt catcatctcc actgggtccc aaggtgagcc actttcggcc
ttgctggcat ceteteteat ecegggtaat gagaatgeeg tetategagt gattaatgge
ctgacgaagc ttggcgccgc cgtggtacat aagggcaacg ctttggtcca cgtttccggc
240
catgoogcaq coqqaqagot gotgtacgog tataacatog tgoggocacg cgctgtgatg
ccgattcatg gtgaggtgcg tcatcttgtc gctaatgccg atctggccaa agcaaccggt
360
gtcgatgaga acaacgtggt gcttgtcgag gacggcgggg ttattgacct tgttgacgga
gtaccgcgag ttgttggcaa ggtcgatgcc tcgtacatcc ttgttgacgg atctggggtg
480
ggggagetta ecgaggacae geteaetgat egeegtatee teggtgagga gggattettg
tcagtcgtca ccgtggtcga cacccgctcg gcgtcagtgg tgtctcgccc ggcgatccag
gcgcgtggtt ttgccgaggg cgactcggtc ttcgcggaga tcaccgacca gatcgtcacc
gagctagaga aggcgatggc cggtggtatg gacgataccc accggttgca a
711
<210> 2158
<211> 237
<212> PRT
<213> Homo sapiens
<400> 2158
Xaa Arg Asp Asn Glu Val Val Ile Ile Ser Thr Gly Ser Gln Gly Glu
                                  10
Pro Leu Ser Ala Leu Ala Arg Ile Ala Asn Arg Glu His Arg Asp Ile
                                                  3.0
           20
                               25
Glu Val Gly Glu Gly Asp Thr Val Leu Leu Ala Ser Ser Leu Ile Pro
                                              45
       35
                          40
Gly Asn Glu Asn Ala Val Tyr Arg Val Ile Asn Gly Leu Thr Lys Leu
                                          60
Gly Ala Ala Val Val His Lys Gly Asn Ala Leu Val His Val Ser Gly
                   70
                                      75
65
His Ala Ala Ala Gly Glu Leu Leu Tyr Ala Tyr Asn Ile Val Arg Pro
                                  90
               85
Arg Ala Val Met Pro Ile His Gly Glu Val Arg His Leu Val Ala Asn
                               105
           100
Ala Asp Leu Ala Lys Ala Thr Gly Val Asp Glu Asn Asn Val Val Leu
                           120
Val Glu Asp Gly Gly Val Ile Asp Leu Val Asp Gly Val Pro Arg Val
                      135
Val Gly Lys Val Asp Ala Ser Tyr Ile Leu Val Asp Gly Ser Gly Val
                  150
                                      155
Gly Glu Leu Thr Glu Asp Thr Leu Thr Asp Arg Arg Ile Leu Gly Glu
                                  170
                                                      175
               165
Glu Gly Phe Leu Ser Val Val Thr Val Val Asp Thr Arg Ser Ala Ser
```

```
180
                                185
Val Val Ser Arg Pro Ala Ile Gln Ala Arg Gly Phe Ala Glu Gly Asp
                                               205
      195
                           200
Ser Val Phe Ala Glu Ile Thr Asp Gln Ile Val Thr Glu Leu Glu Lys
                       215
                                           220
Ala Met Ala Gly Gly Met Asp Asp Thr His Arg Leu Gln
                   230
<210> 2159
<211> 322
<212> DNA
<213> Homo sapiens
<400> 2159
tegegageae actecageet etggagagae gacaaegegt gaaggggeae eagettgegg
ggcagcaget ccaggggcgg cctgggaggg ctttgtgcag aagaagcctg tttccttcta
cetgtttgga aaagttgtet etgeagatgg tgggtgagag ttegetgeea gggeeactgt
cttccctgcc ctgcggacac ttcttcccca ccttcctaaa gctgtgggag acctggagcc
gtggagcatc aatggetett tgacteagga atettaaaaa ateacaeeet ggggetacca
300
tgggggcctt ctggttctcc tt
322
<210> 2160
<211> 100
<212> PRT
<213> Homo sapiens
<400> 2160
Met Val Ala Pro Gly Cys Asp Phe Leu Arg Phe Leu Ser Gln Arg Ala
                                   10
Ile Asp Ala Pro Arg Leu Gln Val Ser His Ser Phe Arg Lys Val Gly
                            . 25
          2.0
                                                   30
Lys Lys Cys Pro Gln Gly Arg Glu Asp Ser Gly Pro Gly Ser Glu Leu
       35
                           40
Ser Pro Thr Ile Cys Arg Asp Asn Phe Ser Lys Gln Val Glu Gly Asn
                                           60
                       55
   50
Arg Leu Leu His Lys Ala Leu Pro Gly Arg Pro Trp Ser Cys Cys
                   70
                                       75
Pro Ala Ser Trp Cys Pro Phe Thr Arg Cys Arg Leu Ser Arg Gly Trp
                                   90
Ser Val Leu Ala
           100
<210> 2161
<211> 1070
<212> DNA
<213> Homo sapiens
<400> 2161
```

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tottagggga agggaaggot tatotgaaga gtagacotot ggttttgaat gagggagaca
qtqqqqatat qaqqqqaqqa aacctcaaaa aqaatatgta tccatcacta tgaaaqgtta
ggctatacag gggaagcctc caaagggaaa tctggaaaaa tgttctgaga gggacattaa
ggatgtactc agaaattaag aaaacatatt aggacttgcc aaaagtgaga gaagcaactg
aggagactta tatgcaaaaa tcgcaaagaa ggagagaaca aaagatggag gttggatgct
300
aaatagggaa agagaacgeg tgaatgaggt agggggcaga acatgcagtg cagaaaaaca
acagatatgg aagggcatta aagagggcta aatgggaata ttaggaaatg agagttggga
atttgtcaga gttgtgtatt aacaaggaga gggtaaggta agaaggtggc aaagtaagag
ccagggcata aggttttgct gtccaggaag ctttgttgga aaaatgttag aagtaatggg
tttggtcagt atggtgagag gtgagagagg ctaaatggga tgggcataaa gggcaggcca
gtggcaagaa tcctatgaaa gtgtaggcag atctgagagc acagacaaat acagtggaga
atgtggcaca gggcagaggg cagtgggctg agcagcgagt gcccatgggg aggggagtat
ccagaagaac ccattgagtc cctaagaatg acacacaggt gacagctgaa agaaggaggg
acacagaaga tatagcagca tgattctctg gggcaaaatg aggaagaaag gaatggaaga
agaaagtgaa gggtteetge tgatgtgagg ggatgaetgg aggaaaggea ggtattgaet
900
ggggggtaaa ggaaccattc ttggatcaag gttatgatgg aataagaagg aagagagagc
tggctagctg agtaaaggac catcgtataa aacagacaaa agttaagact agatggagtg
gcaactaggc agatcagatg tatttttaaa aggggaaact gctaagatct
1070
<210> 2162
<211> 145
<212> PRT
<213> Homo sapiens
<400> 2162
Met Val Leu Tyr Ser Ala Ser Gln Leu Ser Leu Pro Ser Tyr Ser Ile
1
                                    10
Ile Thr Leu Ile Gln Glu Trp Phe Leu Tyr Pro Pro Val Asn Thr Cys
                                                    30
           20
                                25
Leu Ser Ser His Pro Leu Thr Ser Ala Gly Thr Leu His Phe Leu
                            40
Leu Pro Phe Leu Ser Ser Ser Phe Cys Pro Arg Glu Ser Cys Cys Tyr
                       55
Ile Phe Cys Val Pro Pro Ser Phe Ser Cys His Leu Cys Val Ile Leu
Arg Asp Ser Met Gly Ser Ser Gly Tyr Ser Pro Pro His Gly His Ser
```

```
90
                85
Leu Leu Ser Pro Leu Pro Ser Ala Leu Cys His Ile Leu His Cys Ile
                                                    110
                                105
           100
Cys Leu Cys Ser Gln Ile Cys Leu His Phe His Arg Ile Leu Ala Thr
                           120
Gly Leu Pro Phe Met Pro Ile Pro Phe Ser Leu Ser His Leu Ser Pro
                                            140
                        135
   130
Tyr
145
<210> 2163
<211> 657
<212> DNA
<213> Homo sapiens
<400> 2163
tatttaaatc tttataaaaa aggtaggagg atcaggactt cgaccccctt aaaacgcggc
ggestectte caatecacet coacttecta cacecacece getetecece eccecettt
tggttccggg ttggaaggtt gggtgaaatg ggaaccgaat accaatttca cccgggaacc
agtaatgccc atgataaccg ccaagttggg accgaagttg ggatccataa gtacgggcgg
ccagtggggt ggaattgggt taagccccct cccagccttt ctccgaccgc gtgctccgtc
agacatgeca agaggetete tetecaggag agecacetgt gaaacecace eggeatgete
360
ctcccaccac tgtgcacaga cgagtgcctg ggctccagag agggagggag ctgaaggcct
cagacaggag tecgtecegt ccagteccat cateccaaga aacateegge ecgaetecet
gcagctccat ggctcaacaa ggtgcggatg cctgctggac ctggctgctt tccatccaac
tttgatccct tccccaagag gaagagtgct acctagggac aagtgtggtg cgcacaggca
tgcagcctgg tctcttgctc aggcggcttg cgcagattcc tagaggaatc tgcagcg
<210> 2164
<211> 152
<212> PRT
<213> Homo sapiens
<400> 2164
Met Pro Met Ile Thr Ala Lys Leu Gly Pro Lys Leu Gly Ser Ile Ser
Thr Gly Gly Gln Trp Gly Gly Ile Gly Leu Ser Pro Leu Pro Ala Phe
                                25
Leu Arg Pro Arg Ala Pro Ser Asp Met Pro Arg Gly Ser Leu Ser Arg
                                                45
                            40
Arg Ala Thr Cys Glu Thr His Pro Ala Cys Ser Ser His His Cys Ala
                        55
Gln Thr Ser Ala Trp Ala Pro Glu Arg Glu Gly Ala Glu Gly Leu Arg
```

```
70
65
Gln Glu Ser Val Pro Ser Ser Pro Ile Ile Pro Arg Asn Ile Arg Pro
                                    90
Asp Ser Leu Gln Leu His Gly Ser Thr Arg Cys Gly Cys Leu Leu Asp
           100
                               105
Leu Ala Ala Phe His Pro Thr Leu Ile Pro Ser Pro Arg Gly Arg Val
                           120
                                                125
       115
Leu Pro Arg Asp Lys Cys Gly Ala His Arg His Ala Ala Trp Ser Leu
                       135
   130
Ala Gln Ala Ala Cys Ala Asp Ser
145
<210> 2165
<211> 962
<212> DNA
<213> Homo sapiens
<400> 2165
nottteteat egacagegae geacaacegg egacateace ggtgaeggtt caaggtggea
qcccqaqqqc ccqccqtgaa cttattqtqt cqtcttatqq aagaaaaqtc actcqqaaqt
120
accgtaaatc accccagege ctcatecece gaatctgtte gecatetget gtegeceetg
cgcttaaggc atcaccccac tagactgacc gaagtetege egagggagge tagggagget
240
taggtggcca ggaatgacat cgggacgacg tctacgcgtc gaataggcag cggacgtacg
togagtacog googtacggt ggtgtottot gacogcacac gcagagctat cgctaaaaga
ttgatggccc gcacctcagc tatgacgacg gccactctag aggaaatggg tcgtcgacac
420
tcctggttcc gtgatctgtc agccgaagaa agatcgtgga tctcgatcgt ggctcgctca
ggtattgaeg gettegteea gtggtttget gaegatgaeg eegageeeta etececeaee
540
gacgtetteg aegtggegee ceggteeatg accegeaaga teteettgea ecagacagte
gagetegtee geaceaegat tgaegtegtt gaggeaeaaa ttgagaeega aatgeeaege
660
ggtgatcgcc aagtgctgcg cactgccatc gttcactact cccgcgaggt ggccttcgcc
gccgccgagg tttacgcgcg agccgccgaa cgtcgcggta cctgggatga acgtctggaa
780
tecetegteg ttgatgeegt egtgegagee gaegeegatg aacageteat etegegaget
totactoteg getggegeee gggeateaac etetgegteg ttgtegggeg ggeeeegaeg
accgagcatg aactccacgt gctgcgacgt gatggagaac gcatgcagat gacggtgcta
960
gc
962
```

1608

<210> 2166

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<211> 239
<212> PRT
<213> Homo sapiens
<400> 2166
Val Ala Arg Asn Asp Ile Gly Thr Thr Ser Thr Arg Arg Ile Gly Ser
                          10
Gly Arg Thr Ser Ser Thr Gly Arg Thr Val Val Ser Ser Asp Arg Thr
                                             30
                  25
          20
Arg Arg Ala Ile Ala Lys Arg Leu Met Ala Arg Thr Ser Ala Met Thr
      35
                         40
Thr Ala Thr Leu Glu Glu Met Gly Arg Arg His Ser Trp Phe Arg Asp
                                       60
                    55
Leu Ser Ala Glu Glu Arg Ser Trp Ile Ser Ile Val Ala Arg Ser Gly
                                     75
                 70
Ile Asp Gly Phe Val Gln Trp Phe Ala Asp Asp Asp Ala Glu Pro Tyr
                              90
              85
Ser Pro Thr Asp Val Phe Asp Val Ala Pro Arg Ser Met Thr Arg Lys
                                               110
                             105
          100
Ile Ser Leu His Gln Thr Val Glu Leu Val Arg Thr Thr Ile Asp Val
                                           125
                       120
       115
Val Glu Ala Gln Ile Glu Thr Glu Met Pro Arg Gly Asp Arg Gln Val
                              140
        135
Leu Arg Thr Ala Ile Val His Tyr Ser Arg Glu Val Ala Phe Ala Ala
                             155
                150
Ala Glu Val Tyr Ala Arg Ala Ala Glu Arg Arg Gly Thr Trp Asp Glu
                                170
             165
Arg Leu Glu Ser Leu Val Val Asp Ala Val Val Arg Ala Asp Ala Asp
                                               190
                             185
          180
Glu Gln Leu Ile Ser Arg Ala Ser Thr Leu Gly Trp Arg Pro Gly Ile
                                           205
                         200
      195
Asn Leu Cys Val Val Val Gly Arg Ala Pro Thr Thr Glu His Glu Leu
           215
                                       220
His Val Leu Arg Arg Asp Gly Glu Arg Met Gln Met Thr Val Leu
                  230
<210> 2167
<211> 325
<212> DNA
<213> Homo sapiens
<400> 2167
accggtgcag tttgtgaggg gttggtgacg cccgatcggg aggttcacgc cgtcacggcg
catccacatt atcccgactg gaagatctcg ccaggttacg gacagtggtc gcgtagcgaa
cagatogaca gigigacigi gaogogagio agacacticg tocogoggog toccaoggog
attettegag eggtgtetga ggtgaegtte gggttgegte tetgegeegt eegttggega
agcaccgegg egattgtgge tgtgtegeeg geettgetet egaegeggte gegegggteg
tgcgctgatc tcccacagca taccc
325
```

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<210> 2168
<211> 108
<212> PRT
<213> Homo sapiens
<400> 2168
Thr Gly Ala Val Cys Glu Gly Leu Val Thr Pro Asp Arg Glu Val His
                                 10
Ala Val Thr Ala His Pro His Tyr Pro Asp Trp Lys Ile Ser Pro Gly
        20
                             25
Tyr Gly Gln Trp Ser Arg Ser Glu Gln Ile Asp Ser Val Thr Val Thr
                                           45
                         40
Arg Val Arg His Phe Val Pro Arg Arg Pro Thr Ala Ile Leu Arg Ala
                                         60
                     55
 50
Val Ser Glu Val Thr Phe Gly Leu Arg Leu Cys Ala Val Arg Trp Arg
                                      75
Ser Thr Ala Ala Ile Val Ala Val Ser Pro Ala Leu Leu Ser Thr Arg
                                  90
              85
Ser Arg Gly Ser Cys Ala Asp Leu Pro Gln His Thr
           100
                              105
<210> 2169
<211> 309
<212> DNA
<213> Homo sapiens
<400> 2169
gaggacgcct acgtgctcat cacccagggc aagatetegg cgategeega egteetgeeg
atcctggaga aggtcgtcaa ggccggcaag ccgctgctcg tcatcgccga ggacatcgac
ggggaggccc tgtccaccct cgtcgtcaat aagatccgcg gtaccttcag ctcggtggca
gtcaaggcgc ccggcttcgg tgaccgccgc aaggcaatgc tgcaggacat cgccaccctc
accggtggtc aggtcgtcgc tcccgaggtt gggctcaagc tcgaccaggt gggcctcgag
gttcagggc
309
<210> 2170
<211> 103
<212> PRT
<213> Homo sapiens
<400> 2170
Glu Asp Ala Tyr Val Leu Ile Thr Gln Gly Lys Ile Ser Ala Ile Ala
                                   10
Asp Val Leu Pro Ile Leu Glu Lys Val Val Lys Ala Gly Lys Pro Leu
          20
                               25
Leu Val Ile Ala Glu Asp Ile Asp Gly Glu Ala Leu Ser Thr Leu Val
                          40
Val Asn Lys Ile Arg Gly Thr Phe Ser Ser Val Ala Val Lys Ala Pro
```

```
55
Gly Phe Gly Asp Arg Arg Lys Ala Met Leu Gln Asp Ile Ala Thr Leu
                                        75
Thr Gly Gly Gln Val Val Ala Pro Glu Val Gly Leu Lys Leu Asp Gln
                85
                                    90
Val Gly Leu Glu Val Gln Gly
            100
<210> 2171
<211> 518
<212> DNA
<213> Homo sapiens
<400> 2171
cgcgtaatgt gtattaaggt ccttggtggc tcgcatcgcc gttatgcagc aatcggtgat
atcatcaaag tttcagtgaa ggaagcaatt cctcgcggaa aaattaaaaa aggtaatgtt
catteagetg tggtagtgeg taccagaaaa ggtgtacgte gtcccgatgg ttctgttatt
cgttttgatc gcaacgcagc ggttatcttg aatgcaaaca accagccagt cggtacacgt
atctttggcc ctgtaacccg tgagcttcga aatgaaaatt tcatgaagat tgtttcactg
gcgccagaag tactgtaagg aaccgaaaat ggcagcaaaa ataaaacgtg acgatgaagt
360
aattgttatt geeggtaaag ataaaggtaa aactgggaaa gttteteaag ttttaactaa
cggtaaagta attattgaag gtgtaaatgt tcaaaagaaa caccaaaaac caaaccctca
480
agcgggcgtg gaaggcggaa tcattgaaca gaatgcat
518
<210> 2172
<211> 105
<212> PRT
<213> Homo sapiens
<400> 2172
Arg Val Met Cys Ile Lys Val Leu Gly Gly Ser His Arg Arg Tyr Ala
                                    10
                                                        15
1
Ala Ile Gly Asp Ile Ile Lys Val Ser Val Lys Glu Ala Ile Pro Arg
            20
                                25
Gly Lys Ile Lys Lys Gly Asn Val His Ser Ala Val Val Arg Thr
                            40
                                                45
Arg Lys Gly Val Arg Arg Pro Asp Gly Ser Val Ile Arg Phe Asp Arg
                        55
Asn Ala Ala Val Ile Leu Asn Ala Asn Asn Gln Pro Val Gly Thr Arg
Ile Phe Gly Pro Val Thr Arg Glu Leu Arg Asn Glu Asn Phe Met Lys
                85
                                    90
Ile Val Ser Leu Ala Pro Glu Val Leu
            100
```

```
<210> 2173
<211> 475
<212> DNA
<213> Homo sapiens
<400> 2173
nntggggaag aaatgccggt gcatgcactt tgtgcagcat taggtgcagg ggtgatgcag
egggegegtg cettttgegg eggggttteg ageatteate tggtgeatge attttegeat
gcatttcttg tatcctcgtc atgcgtttct ccccatgcac acacattatc gcctttgcac
ccgcagggac gcatggaata cctcgtgaaa tggaagggat ggtcgcagaa gtacagcaca
tgggaaccgg aggaaaacat cctggatgct cgcttgctcg cagcctttga ggaaagggaa
300
agagagatgg agctctatgg ccccaaaaag cgtggaccca agcccaaaac cttcctcctc
aaagcgcagg ccaaggcaaa ggccaaaact tacgagtttc gaagtgactc agccaggggc
ateoggatee cetaceetgg cogetegeee caggacetgg cetecactte coggg
475
<210> 2174
<211> 158
<212> PRT
<213> Homo sapiens
<400> 2174
Xaa Gly Glu Glu Met Pro Val His Ala Leu Cys Ala Ala Leu Gly Ala
1
                5
                                  10
Gly Val Met Gln Arg Ala Arg Ala Phe Cys Gly Gly Val Ser Ser Ile
                                                  30
           20
                               25
His Leu Val His Ala Phe Ser His Ala Phe Leu Val Ser Ser Cys
                           40
Val Ser Pro His Ala His Thr Leu Ser Pro Leu His Pro Gln Gly Arg
                       55
                                           60
Met Glu Tyr Leu Val Lys Trp Lys Gly Trp Ser Gln Lys Tyr Ser Thr
                   70
                                       75
Trp Glu Pro Glu Glu Asn Ile Leu Asp Ala Arg Leu Leu Ala Ala Phe
                                   90
              85
Glu Glu Arg Glu Arg Glu Met Glu Leu Tyr Gly Pro Lys Lys Arg Gly
          100
                              105
                                                 110
Pro Lys Pro Lys Thr Phe Leu Leu Lys Ala Gln Ala Lys Ala Lys Ala
      115
                           120
                                               125
Lys Thr Tyr Glu Phe Arg Ser Asp Ser Ala Arg Gly Ile Arg Ile Pro
   130
                      135
                                           140
Tyr Pro Gly Arg Ser Pro Gln Asp Leu Ala Ser Thr Ser Arg
145
                   150
                                       155
<210> 2175
<211> 462
<212> DNA
<213> Homo sapiens
```

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<400> 2175
cgcgacaccc tctttggtgg gcgccttcct tctccgaatt cgcgaaccct ccagactctg
gcccaggagg ttgtcgagcg tggagccgat atcggcattg ccactgatgg tgacgcagac
egecteggta teattgatga ceaggggeat ttettgeate ceaaceagat cetegtattg
ctgtacacct accttetgga ggacaaggga tggcaggtgc cetgcgtgcg taacctcgcg
acqueccace tgcttgaceg tgtcgccgag gcccacgggc agacctgtta cgaggtaccg
gtcggattta agtgggtgtc gtccaagatg gccgagacca acgccgtcat cggtggtgag
360
tectceggtg gtttgaccgt ccaggggcat attgcaggca aggatggtgt ctatgctggc
accetgetgg tggaaatgat cgccaagegg ggtaagaage tt
462
<210> 2176
<211> 154
<212> PRT
<213> Homo sapiens
<400> 2176
Arg Asp Thr Leu Phe Gly Gly Arg Leu Pro Ser Pro Asn Ser Arg Thr
                          10
Leu Gln Thr Leu Ala Gln Glu Val Val Glu Arg Gly Ala Asp Ile Gly
           20
                               25
Ile Ala Thr Asp Gly Asp Ala Asp Arg Leu Gly Ile Ile Asp Asp Gln
                          40
                                              45
Gly His Phe Leu His Pro Asn Gln Ile Leu Val Leu Leu Tyr Thr Tyr
                      55
Leu Leu Glu Asp Lys Gly Trp Gln Val Pro Cys Val Arg Asn Leu Ala
                                       75
                   70
Thr Thr His Leu Leu Asp Arg Val Ala Glu Ala His Gly Gln Thr Cys
                                   90
Tyr Glu Val Pro Val Gly Phe Lys Trp Val Ser Ser Lys Met Ala Glu
                              105
           100
Thr Asn Ala Val Ile Gly Gly Glu Ser Ser Gly Gly Leu Thr Val Gln
                          120
                                               125
Gly His Ile Ala Gly Lys Asp Gly Val Tyr Ala Gly Thr Leu Leu Val
                      135
Glu Met Ile Ala Lys Arg Gly Lys Lys Leu
                   150
<210> 2177
<211> 478
<212> DNA
<213> Homo sapiens
<400> 2177
ctcgagaatc atgacggcga cgacgtgact atctccaccc gtgtgcctcg tgacggcggg
```

```
accttggact cgattgtcgg cgtgctggcc ggggcatcct ggtatcagcg ggagatccac
gacttttttg gtgtgaggtt tgtcggccct ggggcagatg atcgtgccct ccttgtccac
180
gatgcaccga aaccgcccct gcgcaaggaa gctgtgttgg cgcagcgagc tgacaccgtg
tggccgggtg cggctgacca ggctggctcg aagtccgcga gtcgacgtct gccggtcggc
gttcctgacc ctgagacgtg gcggcgtatc aaagacggcg aggatattcc ggatgccgag
gtcatcgcgg ccatgtctgg ccggcgcccg cgatcagctg cccgtcgaat ggcaagcacg
420
gcgtcaggca ggcaggcatg agacattcga ctatcaacct tgacgtcgac gcgtgcac
<210> 2178
<211> 146
<212> PRT
<213> Homo sapiens
<400> 2178
Leu Glu Asn His Asp Gly Asp Asp Val Thr Ile Ser Thr Arg Val Pro
                                 10
Arg Asp Gly Gly Thr Leu Asp Ser Ile Val Gly Val Leu Ala Gly Ala
                               25
Ser Trp Tyr Gln Arg Glu Ile His Asp Phe Phe Gly Val Arg Phe Val
                                               45
                           40
       35
Gly Pro Gly Ala Asp Asp Arg Ala Leu Leu Val His Asp Ala Pro Lys
                        55
                                            60
Pro Pro Leu Arg Lys Glu Ala Val Leu Ala Gln Arg Ala Asp Thr Val
                                        75
                    70
Trp Pro Gly Ala Ala Asp Gln Ala Gly Ser Lys Ser Ala Ser Arg Arg
               85
                                    90
Leu Pro Val Gly Val Pro Asp Pro Glu Thr Trp Arg Arg Ile Lys Asp
           100
                               105
Gly Glu Asp Ile Pro Asp Ala Glu Val Ile Ala Ala Met Ser Gly Arg
                         120
                                               125
Arg Pro Arg Ser Ala Ala Arg Arg Met Ala Ser Thr Ala Ser Gly Arg
   130
Gln Ala
145
<210> 2179
<211> 296
<212> DNA
<213> Homo sapiens
<400> 2179
gtgcacttcc gagtggacgt cgagcgtcgc attaacgggg ccggcgcggt gggcgcacac
aagacgtcga tgctgcagga tctggacngc gaccgcgcga tggagatcga cccgctcgtc
teegtegtte aggagatggg acgeetggee aacgtgeega egeecaeget egatgtegtg
180
```

```
ctcccactga tcaagcaacg tgaattcatg acgaagccgg atgccgtggc ggccgcgcag
gaacgtotgg ctaaagcggc ataaaccagc cgccgaaacc agcggcataa cgcggn
<210> 2180
<211> 87
<212> PRT
<213> Homo sapiens
<400> 2180
Val His Phe Arg Val Asp Val Glu Arg Arg Ile Asn Gly Ala Gly Ala
                                    10
1
Val Gly Ala His Lys Thr Ser Met Leu Gln Asp Leu Asp Xaa Asp Arg
                                25
Ala Met Glu Ile Asp Pro Leu Val Ser Val Val Gln Glu Met Gly Arg
                            40
       35
Leu Ala Asn Val Pro Thr Pro Thr Leu Asp Val Val Leu Pro Leu Ile
Lys Gln Arg Glu Phe Met Thr Lys Pro Asp Ala Val Ala Ala Gln
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Glu Arg Leu Ala Lys Ala Ala
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<211> 387
<212> DNA
<213> Homo sapiens
<400> 2181
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tegatteceg aeggeatgat egeggeaete gacegtaceg geaaggegea aacgeaecte
acgctggcat cgccggaagc gggtgtcgtc agcgaactga acgtgcgcga cggtgcgatg
gtcgcgccgg ggcagacgct cgcgaagatt tcgggcctct cgaagctctg gctgatcgtc
gagattccgg aagcgctcgc gctcgatgcg cgtccgggca tgaccgtcga cgcgacgttc
300
togggegate egacgeagea titeaceggg egtateegeg agateetgee gggeateace
accagtagee geacgettea ggegege
387
<210> 2182
<211> 129
<212> PRT
<213> Homo sapiens
<400> 2182
Xaa Ala Pro Gly Trp Ile Ile Val Trp Leu Asp Ala Ser Arg Ala Arg
                                    10
Met Arg Ala Leu Ser Ile Pro Asp Gly Met Fle Ala Ala Leu Asp Arg
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25
Thr Gly Lys Ala Gln Thr His Leu Thr Leu Ala Ser Pro Glu Ala Gly
Val Val Ser Glu Leu Asn Val Arg Asp Gly Ala Met Val Ala Pro Gly
                       55
Gln Thr Leu Ala Lys Ile Ser Gly Leu Ser Lys Leu Trp Leu Ile Val
                   70
Glu Ile Pro Glu Ala Leu Ala Leu Asp Ala Arg Pro Gly Met Thr Val
                                  90
Asp Ala Thr Phe Ser Gly Asp Pro Thr Gln His Phe Thr Gly Arg Ile
          100
                              105
                                                   110
Arg Glu Ile Leu Pro Gly Ile Thr Thr Ser Ser Arg Thr Leu Gln Ala
                           120
                                               125
Arg
<210> 2183
<211> 310
<212> DNA
<213> Homo sapiens
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ctgcattttc caagcaggga ggggtcgggc atggagaatg aaacattctg agaaaagact
taaatgtgga aacttttggt tcaagagggt attctaggag atacaagaaa tatctcctgg
gggcatccaa agggaataac actgtaatct tgagtgatgt atggttccat tgcccgagga
atagggatga aaaccataaa ctcctttggg tgggtattaa cttatcantc aaagttacca
tanataatgg
310
<210> 2184
<211> 100
<212> PRT
<213> Homo sapiens
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                                   10
Phe Ser Ser Leu Phe Leu Gly Gln Trp Asn His Thr Ser Leu Lys Ile
                               25
                                                   30
Thr Val Leu Phe Pro Leu Asp Ala Pro Arg Arg Tyr Phe Leu Tyr Leu
                           40
Leu Glu Tyr Pro Leu Glu Pro Lys Val Ser Thr Phe Lys Ser Phe Leu
Arg Met Phe His Ser Pro Cys Pro Thr Pro Pro Cys Leu Glu Asn Ala
                   70
                                     75
Glu Pro Ile His Gln Ser Phe Leu Gly Tyr Gln Thr Val His Lys Phe
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Val Phe Gln Ala
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 Adol 2186

 Xaa Ile Ser Met Gln Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro 1
 5

 Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr 20
 20

 Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro 35
 40

 Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala 50
 55

 Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro 65
 70

 Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg 80

 Arg Cys His Ser Arg Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

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100
                                105
Trp Cys Pro Ser Phe Gly Glu Gly Pro Thr Asp Pro Glu Glu Ala Ala
                            120
Thr Leu Val Arg Glu Pro Arg Arg
                        135
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<212> DNA
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cocgccatat gotgcaaccg caacaccgct ttgccgtcgc atggcatete caeteeggat
cgcatcgatc cacgagggct atcggcgcga aagaagttgc cggggcaaaa tcccggcgag
gaaagcccga tggagtggaa gacgctgctc aacgacaccc gcttcggagg ggtcgccagc
ctcgatggga cgcgcggacg gtcggagttc cagaaggacc acgaccggat catcttctcc
gaageettee geaagetggg eegeaagace eaggtgeace eg
342
<210> 2188
<211> 51
<212> PRT
<213> Homo sapiens
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Met Glu Trp Lys Thr Leu Leu Asn Asp Thr Arg Phe Gly Gly Val Ala
                                    10
Ser Leu Asp Gly Thr Arg Gly Arg Ser Glu Phe Gln Lys Asp His Asp
                                25
            20
Arg Ile Ile Phe Ser Glu Ala Phe Arg Lys Leu Gly Arg Lys Thr Gln
        35
                            40
Val His Pro
    50
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<211> 1412
<212> DNA
<213> Homo sapiens
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cgttcttcca cgcgatgcta gatgccgggg tcaacctgcc gccatcgtgc tttgaggcct
120
ggttcctctc ggacgctcac gacgacgaag ctttcgaggt tttccgcgcc gccctgccga
gggctgccca ggcggctgcc caggtgatca gtgcctgaca ccgggctgac ttcgcaggtc
240
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60
Pro Thr Pro Asp Asp Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala
                                      75
                   70
Ala Trp Gly Arg Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser
                                                     95
                                  90
              85
Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser
                           105
                                                   110
           100
Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser
                                               125
                          120
       115
Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr
                                           140
                       135
Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys
                                       155
                  150
145
Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val
                                   170
                                                       175
               165
Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu
                                                   190
                               185
           180
Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys
                                              205
                          200
Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn
                                         220
                      215
Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys
                                      235
                  230
Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys
                                   250
               245
Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg
                              265
           260
Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn
                           280
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Leu Ile Ser Leu
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gactcccttg acgacgacac catttccggg ggtagcccac attggtgctg cctcatggac
120
tacattgaat cocgttcaat cotgaacggo gttcaggacg totccagtot cggaaggacc
agagtattgc tgaatctagc cgacatgacc gaacgcggcc tgagggggga gtccattacc
cgcgaggagg ccctcgagat tcttcgcagc agtgatgatg agctcatgtc aatcatcgcc
gccgccggaa aagtgcgtcg ccactttttc gataaccggg ttcgcctcaa ctacctggtc
aacctcaagt ccggcctgtg tcccgaagac tgctcctatt gctcgcagcg tctgggatcg
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480
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gctgggattg ccggtggtgc ac
502
<210> 2192
<211> 104
<212> PRT
<213> Homo sapiens
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Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu
                                25
Met Ser Ile Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp
                           40
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu
                                       75
                  70
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val
                                    90
Glu Ala Gly Ile Ala Gly Gly Ala
            100
<210> 2193
<211> 321
<212> DNA
<213> Homo sapiens
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aacatactcc tettgecaac tgggtattac tggacettac tgggeettac tggacecaac
atactectet tgecaactgg ggatttaaaa attttaaaag eccetttate teeeteeaca
agtcatgtac tgccaacagg gacacactgt tttctttgga aaccctgctg tgtgcccaga
240
cagaggtccc actgccctgg gacagctccc ttgcctanag gggaaggagg gtgtgtgtgc
tgtgtgttt taggttgggg a
321
<210> 2194
<211> 106
<212> PRT
<213> Homo sapiens
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                                   10
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu
                                25
            20
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Lèu Ala Asn Trp Gly Phe
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40
                                                45
        35
Lys Asn Phe Lys Ser Pro Phe Ile Ser Leu His Lys Ser Cys Thr Ala
                       55
                                            60
Asn Arg Asp Thr Leu Phe Ser Leu Glu Thr Leu Leu Cys Ala Gln Thr
                                        75
                    70
Glu Val Pro Leu Pro Trp Asp Ser Ser Leu Ala Xaa Arg Gly Arg Arg
                                    90
                85
Val Cys Val Leu Cys Val Phe Arg Leu Gly
            100
                                105
<210> 2195
<211> 504
<212> DNA
<213> Homo sapiens
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gacggtgtgg cacaccccaa ctttggcaat atcgtccacg acctggtgct gttgcacagc
ctgggtgtgc gtctggtact ggtccacggt tcgcgcccgc agatcgacag ccgccttgag
gcacgaggcc tggtgccgta ttaccacaag ggcatgcgtg tcaccgatgc atcaacgctc
240
gaatgcgtga tcgatgctgt cgggcaactg cgcattgcga ttgaagcgcg cttgtcgatg
300
gacatggcgt cttcgccaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc
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cgggtggacc gcaagggcat caaccgcctg ctcgatgagc gctcgattgt gctgctgtcg
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<210> 2196
<211> 168
<212> PRT
<213> Homo sapiens
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Met Leu Pro Gly Asp Gly Val Ala His Pro Asn Phe Gly Asn Ile Val
                                25
           20
His Asp Leu Val Leu Leu His Ser Leu Gly Val Arg Leu Val Leu Val
                            40
His Gly Ser Arg Pro Gln Ile Asp Ser Arg Leu Glu Ala Arg Gly Leu
                       55
Val Pro Tyr Tyr His Lys Gly Met Arg Val Thr Asp Ala Ser Thr Leu
                                        75
                    70
Glu Cys Val Ile Asp Ala Val Gly Gln Leu Arg Ile Ala Ile Glu Ala
                                    90
                85
Arg Leu Ser Met Asp Met Ala Ser Ser Pro Met Gln Gly Ser Arg Leu
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100
                                105
Arg Val Ala Ser Gly Asn Leu Val Thr Ala Arg Pro Ile Gly Val Leu
                                               125
                          120
Asp Gly Val Asp Phe His His Thr Gly Glu Val Arg Arg Val Asp Arg
                       135
                                           140
   130
Lys Gly Ile Asn Arg Leu Leu Asp Glu Arg Ser Ile Val Leu Leu Ser
                                        155
                   150
Pro Leu Gly Tyr Ser Pro Thr Gly
               165
<210> 2197
<211> 351
<212> DNA
<213> Homo sapiens
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ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag
ttagattccg cagtgcagca catccacggt gctactcacg ataaactgtc cggtgctgtt
ccgaaacgct acgatggtcg ggatgtcttg gcaggcgagg acccgaatgc accgttgctg
cttgtgccta gcccggctgg tgcagtgttt agtcaaaata aggcacaagc ctggtccaat
gaagaccaca ttgtttttgc ctgtgggcgc tatgaaggta ttgatcaacg c
351
<210> 2198
<211> 117
<212> PRT
<213> Homo sapiens
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Thr Ser Pro Ser Thr Ile Arg Phe Pro Glu Ala Gly Pro Gly Met Val
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Met Lys Pro Glu Leu Trp Gly Pro Ala Leu Asp Glu Ile Ala Ala Gly
                                25
                                                    30
            20
Lys Arg Ala Gly Gly Ala Glu Gln Leu Asp Ser Ala Val Gln His Ile
                                                45
                            40
His Gly Ala Thr His Asp Lys Leu Ser Gly Ala Val Pro Lys Arg Tyr
                                            60
                        55
   50
Asp Gly Arg Asp Val Leu Ala Gly Glu Asp Pro Asn Ala Pro Leu Leu
                    70
                                        75
Leu Val Pro Ser Pro Ala Gly Ala Val Phe Ser Gln Asn Lys Ala Gln
                85
Ala Trp Ser Asn Glu Asp His Ile Val Phe Ala Cys Gly Arg Tyr Glu
                                105
            100
Gly Ile Asp Gln Arg
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<210> 2199
<211> 457
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<213> Homo sapiens
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ggagcccggg agaagggctg gaaggagggg actggacgtg cggagaattc ccccctaaaa
ggcagaagec eccgeeeca eceteegage teegtteggg cagagegeet geetgeetge
180
cgttgctggg ggcgcccacc tcgcccagcc atgccaggcc cggccaccga cgcggggaag
240
atccctttct gcgacgccaa ggaagaaatc cgtgccgggc tcgaaagctc tgagggcggc
ggcggcccgg agaggccagg cgcgcgggg cagcggcaga acatcgtctg gaggaatgtc
gtcctgatga gcttgctcca cttgggggcc gtgtactccc tggtgctcat ccccaaagcc
aagccactca ctctgctctg gggtaagtcc cgccggc
457
<210> 2200
<211> 152
<212> PRT
<213> Homo sapiens
<400> 2200
Arg Arg Arg Pro Pro Arg Ser Ala Ser Leu Gly His Ala Lys Thr Leu
                                    10
1
Gly Lys Ser Ala Gly Ala Arg Glu Lys Gly Trp Lys Glu Gly Thr Gly
                                25
           20
Arg Ala Glu Asn Ser Pro Leu Lys Gly Arg Ser Pro Arg Pro His Pro
                            40
Pro Ser Ser Val Arg Ala Glu Arg Leu Pro Ala Cys Arg Cys Trp Gly
                                            60
                       55
   50
Arg Pro Pro Arg Pro Ala Met Pro Gly Pro Ala Thr Asp Ala Gly Lys
                                        75
                   70
Ile Pro Phe Cys Asp Ala Lys Glu Glu Ile Arg Ala Gly Leu Glu Ser
                85
                                    90
Ser Glu Gly Gly Gly Pro Glu Arg Pro Gly Ala Arg Gly Gln Arg
                                105
           100
Gln Asn Ile Val Trp Arg Asn Val Val Leu Met Ser Leu Leu His Leu
                                               125
                            120
       115
Gly Ala Val Tyr Ser Leu Val Leu Ile Pro Lys Ala Lys Pro Leu Thr
                       135
Leu Leu Trp Gly Lys Ser Arg Arg
145
<210> 2201
<211> 336
<212> DNA
<213> Homo sapiens
<400> 2201
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agtactgcga tggacagcta tgtcgtggat ggtggtcgca aattacatgt ttgtggtaac
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aaccctgatt gcgatggtta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat
ggtccgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggtcgtttt
180
ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagtggtcaa
cetgeteege caegtgtaga cecaateaaa atggageate taegtteaac gaageatgat
gatttcttcg tcttacgtga gggcgctgct ggttta
336
<210> 2202
<211> 112
<212> PRT
<213> Homo sapiens
<400> 2202
Ser Thr Ala Met Asp Ser Tyr Val Val Asp Gly Gly Arg Lys Leu His
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                                  10
                5
Val Cys Gly Asn Asn Pro Asp Cys Asp Gly Tyr Glu Val Glu Glu Gly
                                25
            20
Glu Phe Lys Ile Lys Gly Tyr Asp Gly Pro Thr Ile Pro Cys Asp Lys
                            40
                                               45
        35
Cys Asp Gly Glu Met Gln Leu Lys Thr Gly Arg Phe Gly Pro Tyr Phe
                       55
Ala Cys Thr Ser Cys Asp Asn Thr Arg Lys Val Leu Lys Ser Gly Gln
                                        75
                    70
65
Pro Ala Pro Pro Arg Val Asp Pro Ile Lys Met Glu His Leu Arg Ser
                                                       95
                85
                                   90
Thr Lys His Asp Asp Phe Phe Val Leu Arg Glu Gly Ala Ala Gly Leu
            100
                                105
<210> 2203
<211> 273
<212> DNA
<213> Homo sapiens
<400> 2203
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gtgatggaaa actcaacaga ctggttcaga tettggeeeg gageeeagag geacegggga
120
cccccagggc tgtttctccc tggccacacc agtaccccac ttccaaatgc cctgtaggtg
accaccagge cacacaggee egtetgaggg gecacagget gtgcaccatg ggacgcagge
ctgtccctgc ctccctccga tgtcctgatg gtg
273
<210> 2204
<211> 88
<212> PRT
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<213> Homo sapiens <400> 2204 Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu 10 Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser 25 30 20 Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln 45 40 35 Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala 60 55 Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro 75 65 70 Ala Ser Leu Arg Cys Pro Asp Gly <210> 2205 <211> 387 <212> DNA <213> Homo sapiens <400> 2205 gnnnnnggng nnnnactggt gtgcatggtt aaaatcctgc aagctactgg gttgccacag catctgtccc actttgtgtt ctgcaaatac agettctggg atcaacagga gccggtgatt 120 gtcgctcctg aagtggacac ctcctcctct tccgtcagca aggagccgca ctgcatggtt 180 gtotttgate attgcaatga gttttctgtt aacatcaccg aagactttat cgagcatctt tecgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatee eeggaaaaac cccgccctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg agtgaagtgc ccaggaaatt ggaattc 387 <210> 2206 <211> 129 <212> PRT <213> Homo sapiens <400> 2206 Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr 5 10 Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe 20 25 Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser 40 Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His 55 Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu 75 70

Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```
90
                85
Pro Arg Lys Asn Pro Ala Leu Trp Asp Leu Gly Ile Ile Gln Ala Lys
                                                    110
                                105
Thr Arg Ser Leu Arg Asp Arg Trp Ser Glu Val Pro Arg Lys Leu Glu
                            120
       115
Phe
<210> 2207
<211> 667
<212> DNA
<213> Homo sapiens
<400> 2207
atetecaace ecgagaceet etecaataca geeggetteg agggetacat egacetggge
cgcgagetet ceageetgea etcaetgete tgggaggeeg teageeaget ggageagage
atagtateca aactgggace cetgeetegg atectgaggg acgtecacae ageactgage
accccaggta gcgggcagct cccagggacc aatgacctgg cctccacacc gggctctggc
agcagcagca totcagctgg gotgcagaag atggtgattg agaacgatot ttocggtotg
atagatttca cccggttacc gtctccaacc cccgaaaaca aggacttgtt ttttgtcaca
360
aggtcctccg gggtccagcc ctcacctgcc cgcagctcga gttactcgga agccaacgag
cctgatcttc agatggccaa cggtggcaag agcctctcca tggtggacct ccaggacgcc
cgcacgctgg atggggaggc aggctccccg gcgggccccg acgtcctccc cacagatggg
caggeegetg eageteaget ggtggeeggg tggeeggeec gggeaaceee agtgaacetg
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ggcgcgc
667
<210> 2208
<211> 222
<212> PRT
<213> Homo sapiens
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Ile Ser Asn Pro Glu Thr Leu Ser Asn Thr Ala Gly Phe Glu Gly Tyr
                                    10
Ile Asp Leu Gly Arg Glu Leu Ser Ser Leu His Ser Leu Leu Trp Glu
Ala Val Ser Gln Leu Glu Gln Ser Ile Val Ser Lys Leu Gly Pro Leu
Pro Arg Ile Leu Arg Asp Val His Thr Ala Leu Ser Thr Pro Gly Ser
                                             60
                        55
Gly Gln Leu Pro Gly Thr Asn Asp Leu Ala Ser Thr Pro Gly Ser Gly
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70
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
                          90
              85
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
                           105
          100
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
                         120
                                             125
       115
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
                                         140
            135
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
                 150
                                    155
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
                     170
              165
Pro Thr Asp Gly Gln Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
                                                190
                             185
           180
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
                                             205
                       200
Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala
                      215
  210
<210> 2209
<211> 353
<212> DNA
<213> Homo sapiens
<400> 2209
ngggaagttg gtactageet cecaaageea eteteetgag tgacattgag ageateetat
agagaaggcc atgagagaga tagcactggg acagatggtg tcagcagagg ggactccaga
ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaagggtg ggaggcttca
cacagcagag cctgggtctg gaggcacctt ggggatgttt ttccccatta ggcccctgag
ctctatggaa gcacttaact gcctgttccc cgcttattct gtgtttaaac caaggaaaca
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<210> 2210
<211> 94
<212> PRT
<213> Homo sapiens
<400> 2210
Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
                            10
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
                                                 30
                              25
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
                                             45
                          40
       35
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
                      55
                                         60
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp
```

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во
                   70
                                        75
Gly Leu Lys Ser Trp Ile Gln Ile Leu Thr Val Leu Cys Ala
<210> 2211
<211> 493
<212> DNA
<213> Homo sapiens
<400> 2211
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cactgtaccc tgggactgca cagagggaaa cgattaccaa acccagagac ggggaccgga
aggaaggagg ggaaggggat ggatccatgt actttggggt tggagaaatg ggggacagca
agtotoctca acceaaatac agcccccctg ggaggetect geecegtete tgtggatagt
gagcccagct gcaagggcgg cctgccaggg acaaacccac caaaaggaaa gatgttgtag
aaccaaagag aggeteeetg aaagaggegt eteeegggge eteeaageee gggagegeee
ggcggacagg gggcagtggc caagtctgtg cggaccctga ccgcctcaga gaacgagagc
atgcgcaaag tcatgcccat caccaagtcc agcagaggcg ccggctggag gcgaccagag
480
ctgtcatccc ggg
493
<210> 2212
<211> 126
<212> PRT
<213> Homo sapiens
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Met Gly Met Thr Leu Arg Met Leu Ser Phe Ser Glu Ala Val Arg Val
                                    10
                5
Arg Thr Asp Leu Ala Thr Ala Pro Cys Pro Pro Gly Ala Pro Gly Leu
            20
                                25
Gly Gly Pro Gly Arg Arg Leu Phe Gln Gly Ala Ser Leu Trp Phe Tyr
                            40
Asn Ile Phe Pro Phe Gly Gly Phe Val Pro Gly Arg Pro Pro Leu Gln
                                            60
                        55
Leu Gly Ser Leu Ser Thr Glu Thr Gly Gln Glu Pro Pro Arg Gly Ala
Val Phe Gly Leu Arg Arg Leu Ala Val Pro His Phe Ser Asn Pro Lys
                                   90
Val His Gly Ser Ile Pro Phe Pro Ser Phe Leu Pro Val Pro Val Ser
                               105
Gly Phe Gly Asn Arg Phe Pro Leu Cys Ser Pro Arg Val Gln
                            120
<210> 2213
<211> 327
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1629

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<212> DNA
 <213> Homo sapiens
 <400> 2213
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 gccggtgctt cgacacactg ggttatatcg ccctcaaagc acaggtctac gaaggttetg
 acggaaggcc cggccaatcc gatcgcggcc tcggcgctgc gcatcatccg ggcgcgcgtg
 180
 tegeagetet ggggcaegte getgeteege aacggaeggg eggaacagag tgtggtggag
 240
 atcgcccggt tggtcgacgc gatcacgtca cgggacgagg aagccgccca gcgtgcactg
 300
 ctcgaccaca atcgcagcgc gttggaa
 327
 <210> 2214
 <211> 95
 <212> PRT
 <213> Homo sapiens
 <400> 2214
 Met Arg Ser Pro Ser Ile Ala Gly Ala Ser Thr His Trp Val Ile Ser
                                                          15
                                     10
 1
                  5
 Pro Ser Lys His Arg Ser Thr Lys Val Leu Thr Glu Gly Pro Ala Asn
             20
                                 25
                                                      3.0
 Pro Ile Ala Ala Ser Ala Leu Arg Ile Ile Arg Ala Arg Val Ser Gln
                             40
         35
 Leu Trp Gly Thr Ser Leu Leu Arg Asn Gly Arg Ala Glu Gln Ser Val
                         55
                                              60
 Val Glu Ile Ala Arg Leu Val Asp Ala Ile Thr Ser Arg Asp Glu Glu
                                          75
                     70
. Ala Ala Gln Arg Ala Leu Leu Asp His Asn Arg Ser Ala Leu Glu
                 85
                                     90
 <210> 2215
 <211> 430
 <212> DNA
 <213> Homo sapiens
 <400> 2215
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 ccgaagctgg aaacccttaa gaaggagggc gcgtccggtc agaacaagat cacccagtac
 accepttace teactetegt gettggeetg ttgcaggeaa eggeettegt caegettgee
 acctecque gtetatteae enntgeaget ntgecagteg tetactecae eteggtette
 gaagtegteg teatgateet gaetatgaeg geeggtaega ceategteat gtggatgggt
 qaqctcatca ccgaccgcgg tatcggcaac ggtatgtcga tcatgatttt cactcagatt
 360
```

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geggegegtt tecetgaete getgtggtet ateaaggteg etegaaatgg egeeggteag
420
geteaegegt
430
<210> 2216
<211> 143
<212> PRT
<213> Homo sapiens
<400> 2216
Leu Gly Ile Met Pro Tyr Ile Thr Ala Ser Ile Ile Leu Gln Leu Leu
                                   10
1
Thr Val Val Ile Pro Lys Leu Glu Thr Leu Lys Lys Glu Gly Ala Ser
            20
                                25
Gly Gln Asn Lys Ile Thr Gln Tyr Thr Arg Tyr Leu Thr Leu Val Leu
                            40
Gly Leu Leu Gln Ala Thr Ala Phe Val Thr Leu Ala Thr Ser Gly Arg
                       55
Leu Phe Thr Xaa Ala Ala Xaa Pro Val Val Tyr Ser Thr Ser Val Phe
                                        75
                    70
Glu Val Val Met Ile Leu Thr Met Thr Ala Gly Thr Thr Ile Val
                                    90
                85
Met Trp Met Gly Glu Leu Ile Thr Asp Arg Gly Ile Gly Asn Gly Met
                               105
            100
Ser Ile Met Ile Phe Thr Gln Ile Ala Ala Arg Phe Pro Asp Ser Leu
                           120
                                                125
Trp Ser Ile Lys Val Ala Arg Asn Gly Ala Gly Gln Ala His Ala
                        135
    130
<210> 2217
<211> 444
<212> DNA
<213> Homo sapiens
<400> 2217
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atgacgtggc tcgatgacga cgtgggcgcc gacctgttga atcaggctga ttccatggac
catgccctgg aggccaccgt cccaggtcgg gtcaccacgc cggacgccca agtcatccag
acctgtgccg tgttgcgtga ccttgctcgc gtggcagtca gccagctggg ccgaaatgac
gaggactcta gggaaccagt cgatgcggag agagtacagg ctcaagcgnc gatgcgggag
gttttcgaga ccgccgaacg catggtgggg ctggccgccg ccgacgtggt gtgggtctct
360
gagtctgaga agggataccg cagcattcac gtcgctccgc tgagtgttgg cggcttgcta
cgagagaatg tetttgetca gtcc
444
<210> 2218
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<211> 148
<212> PRT
<213> Homo sapiens
<400> 2218
Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr
                                    10
1
Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Asp Val Gly Ala Asp Leu
                                25
                                                    30
Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro
                            40
Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val
                                            60
Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp
                    70
                                        75
Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala
Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala
                                105
           100
Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser
                           120
                                                125
       115
Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val
                       135
   130
Phe Ala Gln Ser
145
<210> 2219
<211> 688
<212'> DNA
<213> Homo sapiens
<400> 2219
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ggcattacga atatggcgtg gatgtggcta tggttcgacg agcccggaaa ccgttgggag
tggtcgatcc ttttccccgc tgggtggctg accagcgctt tggtcagtca ggggttcggt
ggaatgttee atagtgtgea gattgegegt catgteagea gttaceaegg cateatggte
gctttcgcgc tcgttgggta cggatggctt gcgatgcaca acttgcgtca ccctgatgag
egetattega ttegetegge ettgataate ggeateggea tecagtteae etgggaggea
gtgctgatga tctcgggtat caggccgttg acatggcgcc cgcttgttat cgattctctc
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cccgaaggaa ttcctggctc taccagtccg cgcccgaccg cccgtggcac agcgcgagtc
tatatgaggg atgatettgt ttetegaege ettetaeage gteettgaga geetetgega
gcgaagggcg cgggtgtagg teteceeggg getegttgtg gteeeteete tgcgtgaege
660
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agagccgtgt gatgaggcga agtcatga
688
<210> 2220
<211> 189
<212> PRT
<213> Homo sapiens
<400> 2220
Met Ser Val Leu Pro Leu Glu Ile Trp Leu Ser Phe Ser Tyr Gly Ile
                                    10
                                                        15
                 5
1
Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg
                                25
           20
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu
                            40
                                                45
       35
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg
                                            60
                        55
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly
                    70
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr
                                   90
                85
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp
                                105
                                                    110
           100
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro
                                                125
                           120
       115
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met
                        135
                                            140
   130
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly
                                        155
145
                   150
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met
                                    170
Arg Asp Asp Leu Val Ser Arg Arg Leu Leu Gln Arg Pro
           180
<210> 2221
<211> 530
<212> DNA
<213> Homo sapiens
<400> 2221
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aaagaagagc aaaccgccat cgctaacgtc ctttccgaca tggacaccga actcgacgcc
120
ctacaacaac gcctcagtaa aaccaaaacc atcaagcaag gcatgatgca agaactactc
acagggaaaa cgaggttggt atgagccaca aggtgaattt agtgcatgag ctggataagc
gtattatete ggtaaataeg ttattgteae ageetgaget tgetatteeg gettateage
ggccttataa atggtcacaa gagaacctaa atgcgctgat gagtgattta cgaatttatc
360
gtaacaaatc ggcttatcgg ctggggacgg tggtttttca ttatcataat gaacccgtag
```

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acaacgagaa tacccacaag ctggatattg tagacggtca gcaacgtacc ttaaccttgt
tgctgctagt caaagccatt ttagaagaac ggttgtctgc gttaacgcgt
530
<210> 2222
<211> 67
<212> PRT
<213> Homo sapiens
<400> 2222
Thr Ser Val Ala Ala Ile Tyr Thr Arg Asp Leu Leu Gln Leu Ser Leu
                                    10
1
Ile Leu Pro Pro Lys Glu Glu Gln Thr Ala Ile Ala Asn Val Leu Ser
                                25
Asp Met Asp Thr Glu Leu Asp Ala Leu Gln Gln Arg Leu Ser Lys Thr
                            40
        35
Lys Thr Ile Lys Gln Gly Met Met Gln Glu Leu Leu Thr Gly Lys Thr
                        55
Arg Leu Val
65
<210> 2223
<211> 482
<212> DNA
<213> Homo sapiens
<400> 2223
cggccgccgc ggtagtgagc cctgcgtcgg tggcgtaatg gaaaatgctg cgctggttgg
acaggegega gaeattgttg tggaegatge egetgtegat eggtggeaeg eeggtgaaga
tgcatttatc caacggccgg gacagggccg gcagttcaca gtccagtttg taaagcgctg
cgcgtcctgc gctgatatag gcctggagat gccccatggc gtgtcgggca acctcgtagt
tcaggccgtc gagcaccaca aggatgacgt tgtgcttcat aaggggagac gctccgcaac
gataggettg acteatttea ettgaggaac ggggtcaaaa etgtgggege gggcaageee
360
gctcccacac aagcccgtgc ccacattgga tctccaatgt gggctacagc cttactgcat
attgatgatg acttcttcct gccacttctg cggcagtgcc ttggaggtct tttcccacgc
gt
482
<210> 2224
<211> 105
<212> PRT
<213> Homo sapiens
<400> 2224
Met Ser Gln Ala Tyr Arg Cys Gly Ala Ser Pro Leu Met Lys His Asn
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10
Val Ile Leu Val Val Leu Asp Gly Leu Asn Tyr Glu Val Ala Arg His
                                25
Ala Met Gly His Leu Gln Ala Tyr Ile Ser Ala Gly Arg Ala Ala Leu
                            40
       35
Tyr Lys Leu Asp Cys Glu Leu Pro Ala Leu Ser Arg Pro Leu Asp Lys
                                            60
                        55
Cys Ile Phe Thr Gly Val Pro Pro Ile Asp Ser Gly Ile Val His Asn
                                        75
                    70
65
Asn Val Ser Arg Leu Ser Asn Gln Arg Ser Ile Phe His Tyr Ala Thr
                                    90
                85
Asp Ala Gly Leu Thr Thr Ala Ala Ala
            100
<210> 2225
<211> 753
<212> DNA
<213> Homo sapiens
<400> 2225
nacgogtotg atocacacgg gocactgacg tggogttatg acagggageg ggccggtgcc
ggcgtcatcc tcgatctcat gggtcacgga gaggatctcg tccagtatct actcaaaggg
cgattcactg aggtgtccgc cgtgtccgag acgttcatcc gtcagcgtcc caagccactc
aaggagggca teggeeacae aggttgggte gteteggaeg agetegggee ggtgggeaae
gaggattatt gcgctgtcat cgcccgtatg gaaaacggag tgatgtgcac cctggagtcc
agtogggtca gtgttgggoc gogogoggag tacatogtog agatotatgg aacogaogga
tcaatccggt ggaacttcga ggatctcaac catttgcagg tctgtctggg gcgaaacaat
cgtgccctgc agggatatgt caactgcatg gccggaccag acttcccgga gttcatgcgt
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aaattcgtcc gaggggtctt ggatgggcag caatatggcc catctgtcgc cgatggttgg
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660
cgtgaagccg gtttcgggga gaaccacgtt cgataagtga ccgcgtcatc gcgtgtctgt
gaccaggeet ggeggeacaa ccaggtegee gge
753
<210> 2226
<211> 219
<212> PRT
<213> Homo sapiens
<400> 2226
Xaa Ala Ser Asp Pro His Gly Pro Leu Thr Trp Arg Tyr Asp Arg Glu
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```
10
Arg Ala Gly Ala Gly Val Ile Leu Asp Leu Met Gly His Gly Glu Asp
                              25
           20
Leu Val Gln Tyr Leu Leu Lys Gly Arg Phe Thr Glu Val Ser Ala Val
                          40
Ser Glu Thr Phe Ile Arg Gln Arg Pro Lys Pro Leu Lys Glu Gly Ile
Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn
                                      75
                   70
Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys
              85
Thr Leu Glu Ser Ser Arg Val Ser Val Gly Pro Arg Ala Glu Tyr Ile
                                                 110
                            105
Val Glu Ile Tyr Gly Thr Asp Gly Ser Ile Arg Trp Asn Phe Glu Asp
                          120
                                               125
      115
Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln
                      135
                                         140
Gly Tyr Val Asn Cys Met Ala Gly Pro Asp Phe Pro Glu Phe Met Arg
                                      155
                  150
Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val
              165
                                  170
                                                      175
Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr
                                                   190
                               185
          180
Gly Pro Ser Val Ala Asp Gly Trp Ala Ser Ala Glu Val Asn Asp Ala
                       200
Ile Val Ala Ser Cys Gly Gly Pro Cys Leu Ala
<210> 2227
<211> 324
<212> DNA
<213> Homo sapiens
<400> 2227
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ggetgttcat gtcctttcct tagcaacttg gggtcctcta aggttctacc tgggaagaga
gaetttgtac gaacgetteg tactcaccag geactgtggt gtaaatcccc ggtaaagcca
qqaattccat ataagcagtt gacagttggg gtccccaagg agattttcca aaacgagaag
cgagttgcat tgtctcctgc gggggtccag gccctggtca agcagggctt caatgttgtc
gtggaatcag gcgcaggcga agct
324
<210> 2228
<211> 98
<212> PRT
<213> Homo sapiens
<400> 2228
Met Ala His Leu Leu Lys Thr Val Val Ala Gly Cys Ser Cys Pro Phe
```

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10
Leu Ser Asn Leu Gly Ser Ser Lys Val Leu Pro Gly Lys Arg Asp Phe
Val Arg Thr Leu Arg Thr His Gln Ala Leu Trp Cys Lys Ser Pro Val
                           40
Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu
                                           60
Ile Phe Gln Asn Glu Lys Arg Val Ala Leu Ser Pro Ala Gly Val Gln
                                      75
                  70
Ala Leu Val Lys Gln Gly Phe Asn Val Val Glu Ser Gly Ala Gly
Glu Ala
<210> 2229
<211> 320
<212> DNA
<213> Homo sapiens
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cccacagaga gggaacgggc ggggggaggg gaggagagaa gacagactca ggcagaaccc
tageteagee cetteetgeg tgeetggeee tgggaggatg ceatececag teccetette
180
tgggccctgc tctggggact cggcacagat ggatccagtg catcctcagc cccctgagaa
getgtgetge cateagetee ttetetgggt acagggeacg ggaagegget geccageagg
cctcggtccc gccaagctgt
<210> 2230
<211> 94
<212> PRT
<213> Homo sapiens
<400> 2230
Met Gly Gly Pro Asp Gly Glu Ala His Arg Glu Gly Thr Gly Gly Gly
                                   10
Arg Gly Glu Lys Thr Asp Ser Gly Arg Thr Leu Ala Gln Pro Leu
           20
                               25
Pro Ala Cys Leu Ala Leu Gly Gly Cys His Pro Gln Ser Pro Leu Leu
                           40
                                               45
Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
                       55
Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala
Arg Glu Ala Ala Ala Gln Gln Ala Ser Val Pro Pro Ser Cys
<210> 2231
<211> 671
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<212> DNA
<213> Homo sapiens
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aaagcccagt tcaatgcccc actgggaaat gcttcccatt aattgtggaa ttgtcgtgcc
180
catttactgt cggggtgaca gggggggtgg gggtcagagt agagacagga gaaggaagtg
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cccccaatg gcactgtgaa gccagtgttg ttttacagat gaggaaactg agatttgtgg
ctataacaga taaacagatg accetgaatg gggcaggtca tgtcatetge catagataca
tgcatagaac aatgcaaacc agtcagtccc ctctgagtca gaccaggctg accatcaggg
acatgcagac actggcaggg ctggggttgt tccccatcgg tgatagcctg gtgcccccat
ggcccctgat gcccacggct gtctggaagg ctgggtcact gctgagaaga caaggagaca
600
ttttctctca ccaqctttct tttttctatt ccttcttaga cacctgagct gcggtgatca
660
cagctcttaa g
671
<210> 2232
<211> 177
<212> PRT
<213> Homo sapiens
<400> 2232
Met Glu Lys Ser Pro Val Gln Cys Pro Thr Gly Lys Cys Phe Pro Leu
                                   10
                                                        15
Ile Val Glu Leu Ser Cys Pro Phe Thr Val Gly Val Thr Gly Gly Val
                               25
                                                    30
           20
Gly Val Arg Val Glu Thr Gly Glu Gly Ser Glu His Leu Trp Asp Thr
                                                45
                            40
His His Val Pro Gly Thr Glu Pro Tyr Leu Asp Leu Leu Gln Pro Ser
                                            60
                       55
Gln Trp His Cys Glu Ala Ser Val Val Leu Gln Met Arg Lys Leu Arg
                    70
                                        75
Phe Val Ala Ile Thr Asp Lys Gln Met Thr Leu Asn Gly Ala Gly His
                                    90
Val Ile Cys His Arg Tyr Met His Arg Thr Met Gln Thr Ser Gln Ser
                               105
           100
Pro Leu Ser Gln Thr Arg Leu Thr Ile Arg Asp Met Gln Thr Leu Ala
                           120
                                                125
       115
Gly Leu Gly Leu Phe Pro Ile Gly Asp Ser Leu Val Pro Pro Trp Pro
                                            140
                       135
   130
Leu Met Pro Thr Ala Val Trp Lys Ala Gly Sèr Leu Leu Arg Arg Gln
```

```
155
145
                    150
Gly Asp Ile Phe Ser His Gln Leu Ser Phe Phe Tyr Ser Phe Leu Asp
               165
Thr
<210> 2233
<211> 6199
<212> DNA
<213> Homo sapiens
<400> 2233
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gatttcatta aagtgttgcg gcagcacagg atgatgattt tatactgtac cttgctggcc
agtgcacaaa gtgaagctga aaaggaaagg attatgggaa agatggaagc tgacccagag
180
ctatccaagt teetetacca getteatgaa accgagaagg aggatetgat eegagaggaa
aggtcccgga gagagcgagt gcgtcagtct cgaatggaca cagatctgga aaccatggat
ctcgaccagg gtggagaggc actggctcca cggcaggttc tggacttgga ggacctggtt
tttacccaag ggagccactt tatggccaat aaacgctgtc agcttcctga tggatcctcc
420
cgtcgccagc gtaagggcta tgaagaggtg catgtgcctg ctttgaagcc caagcccttt
480
ggotcagaag aacaattgot cooggtggaa aagotgocaa agtatgocca ggotgggttt
gagggettea aaacgetgaa eeggateeag agtaagetet aeegtgetge eettgagaeg
600
gatgagaatc tgctgctgtg tgctcctact ggtgctggga agaccaacgt ggccctgatg
tgcatgetee gagagattgg gaaacacata aacatggaeg geacaateaa tgtggatgae
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ggaaagcgcc tggccacata tggcatcact gttgctgagc tgactgggga tcaccagcta
840
tgcaaggagg aaatcagtgc cacacagatt atcgtctgca cccctgagaa gtgggacatc
900
atcacacgca agggcgggga gcgcacctac acccagctgg tgcgactcat tgtcttggat
gagatccatc ttctacatga tgacagaggt cctgtcttag aagctttggt ggccagggcc
1020
atccgaaaca ttgagatgac ccaagaagat gtccgactca ttggtctcag tgctaccctc
1080
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1140
tttgataaca gcttccgccc cgtgcctctg gaacaaacat atgtgggcat cacagagaaa
aaagctatca aacgtttcca gatcatgaat gaaatagtct atgagaaaat catggaacat
1260
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1320				aagaaactgg	
agggcaatcc 1380	gtgacatgtg	tctggagaag	gacactttgg	gtctgtttct	tcgcgagggt
tctgcctcca 1440	ctgaagtcct	tcgtacagaa	gcagagcagt	gcaagaactt	ggagctgaag
gatcttttgc 1500	cctatggctt	tgctattcat	catgcaggca	tgactagagt	tgaccgaaca
ctcgtggagg 1560	atctttttgc	tgataaacat	attcaggttt	tagtttccac	cgcaactcta
1620	tgaatctccc				
1680	ggcgttggac				
1740	cccagtatga				•
1800	acctgtccct				
1860	acatgctcaa				
1920	ggctgggcta				
1980	ctcatgatga				
2040	cagctgccct				
2100	tccaggtgac				
2160	agacttacaa				
2220	cattgtcctc				
2280	agttgctgga				
2340	tcaacgttct				
2400	ctgacatggt				
2460	tcctgaaccg				
2520	acaaacgcat				
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Leu Leu Cys Ala Pro Thr Gly Ala Gly Lys Thr Asn Val Ala Leu Met
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Cys Met Leu Arg Glu Ile Gly Lys His Ile Asn Met Asp Gly Thr Ile
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Val Gln Glu Met Val Gly Ser Phe Gly Lys Arg Leu Ala Thr Tyr Gly
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Ile Thr Val Ala Glu Leu Thr Gly Asp His Gln Leu Cys Lys Glu Glu
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Ile Val Leu Asp Glu Ile His Leu Leu His Asp Asp Arg Gly Pro Val
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Asp Val Ala Thr Phe Leu Arg Val Asp Pro Ala Lys Gly Leu Phe Tyr
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Leu Glu Leu Lys Asp Leu Leu Pro Tyr Gly Phe Ala Ile His His Ala
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a 1	14	m\	340	1/- 3	200	7	Thr	345	1251	Glu	Nen	Lou	-	nl =	Acn
GIY	mec	355	Arg	vai	ASP	Arg	360	Leu	vai	GIU	АЗР	365	FIIC	AIG	лэр
T.ve	Hic		Gln	Val	Leu	Val	Ser	Thr	Ala	Thr	Leu		Trp	Glv	Val
_, _	370					375					380		•	•	
Asn		Pro	Ala	His	Thr	Val	Ile	Ile	Lys	Gly	Thr	Gln	Val	Tyr	Ser
385					390				-	395					400
Pro	Glu	Lys	Gly	Arg	Trp	Thr	Glu	Leu	Gly	Ala	Leu	Asp	Ile	Leu	Gln
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Met	Leu	Gly	Arg	Ala	Gly	Arg	Pro	Gln	Tyr	Asp	Thr	Lys		Glu	Gly
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Ile	Leu		Thr	Ser	His	Gly	Glu	Leu	GIn	Tyr	Tyr		Ser	Leu	Leu
	-1	435	•		T1.	a 3	440	63 -		12-1	C	445	T 011	Dwa	7 000
Asn		GIN	Leu	Pro	тте	455	Ser	GII	Mec	Val	460	Lys	neu	PIO	Asp
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	-		•	485	-	-		•	490	•		-		495	-
Ser	Pro	Thr	Leu	Tyr	Gly	Ile	Ser	His	Asp	Asp	Leu	Lys	Gly	Asp	Pro
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Leu	Leu	Asp	Gln	Arg	Arg	Leu	Asp	Leu	Val	His	Thr		Ala	Leu	Met
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Leu	_	Lys	Asn	Asn	Leu		Lys	Tyr	Asp	ьуs		Thr	Giy	Asn	Pne
~1 <u>~</u>	530	The	C1	I ou	Clv	535	Ile	λl =	Sar	Wie	540 Tur	Tur	Tle	Thr	Aen
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	Thr	Val	Gln	Thr		Asn	Gln	Leu	Leu		Pro	Thr	Leu	Ser	
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Ile	Glu	Leu	Phe	Arg	Val	Phe	Ser	Leu	Ser	Ser	Glu	Phe	Lys	Asn	Ile
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Thr	Val	Arg	Glu	Glu	Glu	Lys	Leu	Glu	Leu	Gln	Lys		Leu	Glu	Arg
	_	595	_			-3	600	-1-	~1	a 1	D	605		7	71.
Val		Ile	Pro	Val	Lys		Ser	IIe	GIU	GIU	620	ser	Ala	Lys	iie
700	610	Lau	Lou	Gln	λla	615 Dhe	Ile	Ser	Gln	T.em		T.e11	Glu	Glv	Phe
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		675	_	_	_		680	_,	_	_		685	~3	-3	**- 1
		Met	Cys	Pro			Gln		Arg	Lys		Pro	Giu	GIU	vai
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Ile	Thr	Pro	Asp	Phe	Gln	Trp	Asp	GLU	гÀг	val	HIS	GIĀ	ser	ser	GIU

Ala Phe Trp Ite Leu Val Glu Asp Val Asp Ser Glu Val Ite Leu His 785		770					775					78 0				
This Glu		770		71 -	T	1/-1		N ~	**- 1		Ca*		Wa I	T10	Lau	uie
His Glu Tyr Phe Leu Leu Lys Ala Lys Tyr Ala Gln Asp Glu His Leu 805 810 810 815 810 815 810 815 810 815 810 815 810 815 810 815 810 815 810 810 815 810 810 815 810 810 810 810 810 810 810 810 810 810		Pne	Trp	ire	Leu		GIU	мър	val	Asp		GIU	val	116	Den	
Solution	G1	Th	Dho	T		Lvc	31 -	T	T1		Gln	Acn	Glu	uie		
The	H15	GIU	туг	Pne		Leu	ьуѕ	MIG	гуѕ		ALA	GIII	ASP	GIU		Leu
Real Fig. Real	-1-	m1	nh -	D		D	1701	Dha	c1		t ou	D~^	Dro	cln		Dho
The Arg Val Val Ser Asp Arg Trp Leu Ser Cys Glu Thr Gln Leu Pro 815 846 845	He	Inr	Pne		vai	PIO	vaı	Pue		Pro	Leu	PIO	PIG		ıyı	Pile
Sar		_			_							~ 1	m\		*	D
Val	He	Arg		vaı	ser	Asp	Arg		ren	ser	Cys	GIU		GIn	Leu	Pro
S50	_					_			_		_			D	D	m)
Glu Leu Leu Asp Leu Gln Pro Leu Pro Val Ser Ala Leu Arg Asn Ser 865 876 876 875 880 876 885 890 895	Val		Phe	Arg	His	Leu		Leu	Pro	GIU	rys		Pro	Pro	Pro	The
865						_		_	_		_		_	_	_	_
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Second S					_	_		_	_				-1			
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Val Gly Ala Pro Thr Gly Ser Gly Lys Thr Ile Cys Ala Glu Phe Ala 915 920 925 925 925 926 925 926 925 926 926 926 926 926 926 926 930 935 940 950 940 950 950 955 960 955 960 955 960 960 955 960 960 970 975 975 960 975	Gln	Thr	Gln		Phe	Asn	Thr	Val		Asn	Ser	Asp	Asp		Val	Pne
11			_									_				
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945														_	_	
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Thr Pro Glu Lys Trp Asp Ile Leu Ser Arg Arg Trp Lys Gln Arg Lys 995													_			
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Asn Val Gln Asn Ile Asn Leu Phe Val Val Asp Glu Val His Leu Ile 1010																
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Ser Ser Leu Ser Asn Ala Lys Asp Val Ala His Trp Leu Gly Cys Ser 1060 Ala Thr Ser Thr Phe Asn Phe His Pro Asn Val Arg Pro Val Pro Leu 1075 Glu Leu His Ile Gln Gly Phe Asn Ile Ser His Thr Gln Thr Arg Leu 1090 Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His Ser Pro 1105 Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr Arg Leu 1125 Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln 1135 Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys 1155 Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr 1170 Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu 1185 Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu 1185	Gly	1010)				1015		Glu			Cys				
Ser Ser Leu Ser Asn Ala Lys Asp Val Ala His Trp Leu Gly Cys Ser 106	1025	1010 Gly) Glu	Asn	Gly	Pro 1030	1019 Val	Leu		Val	1035	Cys 5	Ser	Arg	Met	1040
Ala Thr Ser Thr Phe Asn Phe His Pro Asn Val Arg Pro Val Pro Leu 1075	1025	1010 Gly) Glu	Asn	Gly Gln	Pro 1030 Ile	1019 Val	Leu		Val Ile	1035 Arg	Cys 5	Ser	Arg	Met Leu	1040 Ser
Ala Thr Ser Thr Phe Asn Phe His Pro Asn Val Arg Pro Val Pro Leu 1075	1025 Tyr	1010 Gly Gle	Glu Ser	Asn Ser	Gly Gln 1045	Pro 1030 Ile	1019 Val) Glu	Leu Arg	Pro	Val Ile	1035 Arg)	Cys i Ile	Ser Val	Arg Ala	Met Leu 105	1040 Ser
Glu Leu His IIe Gln Gly Phe Asn Ile Ser His Thr Gln Thr Arg Leu 1090	1025 Tyr	1010 Gly Gle	Glu Ser	Asn Ser	Gly Gln 1045	Pro 1030 Ile	1019 Val) Glu	Leu Arg	Pro	Val Ile	1035 Arg)	Cys i Ile	Ser Val	Arg Ala Gly	Met Leu 1055 Cys	1040 Ser
Glu Leu His Ile Gln Gly Phe Asn Ile Ser His Thr Gln Thr Arg Leu 1090 1095 1100 Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His Ser Pro 1105 1110 1115 1120 Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr Arg Leu 1125 1130 1135 Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln 1140 1145 1150 Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys 1155 Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr 1170 1175 1180 Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu 1185 1190 1195 1200	1025 Tyr Ser	1010 Gly Ile Ser	Glu Ser Leu	Asn Ser Ser	Gly Gln 1045 Asn	Pro 1030 Ile S Ala	1019 Val) Glu Lys	Leu Arg Asp	Pro Val 1069	Val Ile 1050 Ala	1035 Arg) His	Cys Ile Trp	Ser Val Leu	Arg Ala Gly 1070	Met Leu 1059 Cys	1040 Ser Ser
Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His Ser Pro 1105 Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr Arg Leu 1135 Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln 1145 Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys 1155 Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr 1170 Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu 1185	1025 Tyr Ser	1010 Gly Ile Ser	Glu Ser Leu Ser	Asn Ser Ser 1060 Thr	Gly Gln 1045 Asn	Pro 1030 Ile S Ala	1019 Val) Glu Lys	Leu Arg Asp His	Pro Val 1069 Pro	Val Ile 1050 Ala	1035 Arg) His	Cys Ile Trp	Ser Val Leu Pro	Arg Ala Gly 1070 Val	Met Leu 1059 Cys	1040 Ser Ser
Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His Ser Pro 1105	1025 Tyr Ser Ala	1010 Gly Ile Ser	Ser Leu Ser 1075	Asn Ser Ser 1060 Thr	Gly Gln 1045 Asn) Phe	Pro 1030 Ile Ala Asn	Val Val Glu Lys	Leu Arg Asp His	Pro Val 1069 Pro	Val Ile 1050 Ala Asn	1039 Arg His Wal	Cys Ile Trp Arg	Ser Val Leu Pro 1085	Arg Ala Gly 1070 Val	Met Leu 1055 Cys) Pro	1040 Ser Ser Leu
1110	1025 Tyr Ser Ala	1010 Gly Ile Ser Thr	Ser Leu Ser 1075	Asn Ser Ser 1060 Thr	Gly Gln 1045 Asn) Phe	Pro 1030 Ile Ala Asn	Val Val Glu Lys Phe	Leu Arg Asp His 1080 Asn	Pro Val 1069 Pro	Val Ile 1050 Ala Asn	1039 Arg His Wal	Cys Ile Trp Arg	Val Leu Pro 1085 Gln	Arg Ala Gly 1070 Val	Met Leu 1055 Cys) Pro	1040 Ser Ser Leu
Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr Arg Leu 1125 1130 1135 Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln 1140 1145 1150 Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys 1155 1160 1165 Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr 1170 1175 1180 Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu 1185 1190 1195 1195	1025 Tyr Ser Ala Glu	1010 Gly Ile Ser Thr Leu	Glu Ser Leu Ser 1075	Asn Ser Ser 1060 Thr	Gly Gln 1045 Asn) Phe Gln	Pro 1030 Ile S Ala Asn Gly	Val Val Glu Lys Phe Phe	Arg Asp His 1080 Asn	Val 1069 Pro)	Val Ile 1050 Ala Asn Ser	Arg His Val	Cys Ile Trp Arg Thr	Val Leu Pro 1085 Gln	Arg Ala Gly 1076 Val Thr	Met Leu 1055 Cys Pro Arg	1040 Ser Ser Leu
Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln 1140	1025 Tyr Ser Ala Glu	1010 Gly Ile Ser Thr Leu	Glu Ser Leu Ser 1075	Asn Ser Ser 1060 Thr	Gly Gln 1045 Asn) Phe Gln	Pro 1030 Ile S Ala Asn Gly	Val Val Glu Lys Phe Phe	Arg Asp His 1080 Asn	Val 1069 Pro)	Val Ile 1050 Ala Asn Ser	Arg His Val His	Cys Ile Trp Arg Thr 1100	Val Leu Pro 1085 Gln	Arg Ala Gly 1076 Val Thr	Met Leu 1055 Cys Pro Arg	1040 Ser Ser Leu Leu
Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln 1140 1145 1150 Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys 1155 1160 1165 Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr 1170 1175 1180 Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu 1185 1190 1195 1195 1200	Tyr Ser Ala Glu Leu 1105	Gly Ile Ser Thr Leu 1090 Ser	Glu Ser Leu Ser 1075 His Met	Asn Ser Ser 1060 Thr Ile	Gly Gln 1045 Asn) Phe Gln Lys	Pro 1030 Ile Ala Asn Gly Pro	One of the control of	Arg Asp His 1080 Asn Tyr	Val 1069 Pro Ile	Val Ile 1050 Ala Asn Ser Ala	Arg His Val His Ile	Cys Ile Trp Arg Thr 1100 Thr	Val Leu Pro 1085 Gln Lys	Arg Ala Gly 1070 Val Thr	Leu 1055 Cys Pro Arg	1040 Ser Ser Leu Leu Pro
1140 1145 1145 1150 Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys 1155 1160 1165 Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr 1170 1175 1180 Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu 1185 1190 1195 1200	Tyr Ser Ala Glu Leu 1105	Gly Ile Ser Thr Leu 1090 Ser	Glu Ser Leu Ser 1075 His Met	Asn Ser Ser 1060 Thr Ile	Gly Gln 1045 Asn) Phe Gln Lys	Pro 1030 Ile Ala Asn Gly Pro	One of the control of	Arg Asp His 1080 Asn Tyr	Val 1069 Pro Ile	Val Ile 1050 Ala Asn Ser Ala	Arg His Val His Ile	Cys Ile Trp Arg Thr 1100 Thr	Val Leu Pro 1085 Gln Lys	Arg Ala Gly 1070 Val Thr	Met Leu 1055 Cys Pro Arg Ser Arg	1040 Ser Ser Leu Leu Pro 1120 Leu
Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys Lys 1155 1160 1165 Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr 1170 1175 1180 Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu 1185 1190 1195 1200	Tyr Ser Ala Glu Leu 1109 Lys	IOIG Gly Ile Ser Thr Leu 1090 Ser	Glu Ser Leu Ser 1075 His Met	Asn Ser Ser 1060 Thr Ile Ala Val	Gly Gln 1045 Asn Phe Gln Lys Ile	Pro 1030 Ile Ala Asn Gly Pro 1110 Val	1015 Val Clu Lys Phe 1095 Val Phe	Asp His 1080 Asn Tyr	Val 1069 Pro Ile His	Val Ile 1050 Ala Asn Ser Ala Ser	1035 Arg His Val His Ile 1115 Arg	Cys Ile Trp Arg Thr 1100 Thr	Val Leu Pro 1085 Gln Lys Gln	Arg Ala Gly 1070 Val Thr His	Met Leu 1055 Cys Pro Arg Ser Arg 1135	1040 Ser Ser Leu Leu Pro 1120 Leu
1155 1160 1165 Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr 1170 1175 1180 Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu 1185 1190 1195 1200	Tyr Ser Ala Glu Leu 1109 Lys	IOIG Gly Ile Ser Thr Leu 1090 Ser	Glu Ser Leu Ser 1075 His Met	Asn Ser Ser 1060 Thr Ile Ala Val	Gly Gln 1045 Asn Phe Gln Lys Ile	Pro 1030 Ile Ala Asn Gly Pro 1110 Val	1015 Val Clu Lys Phe 1095 Val Phe	Asp His 1080 Asn Tyr	Val 1069 Pro Ile His	Val Ile 1050 Ala Asn Ser Ala Ser	1035 Arg His Val His Ile 1115 Arg	Cys Ile Trp Arg Thr 1100 Thr	Val Leu Pro 1085 Gln Lys Gln	Arg Ala Gly 1070 Val Thr His	Met Leu 1055 Cys Pro Arg Ser Arg 1135	1040 Ser Ser Leu Leu Pro 1120 Leu
Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr 1170 1175 1180 Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu 1185 1190 1195 1200	Tyr Ser Ala Glu Leu 1109 Lys	101(Gly Ile Ser Thr Leu 109(Ser Lys	Ser Leu Ser 1075 His Met Pro	Asn Ser 1060 Thr Ile Ala Val Asp	Gly Gln 1045 Asn Phe Gln Lys Ile 1125 Ile	Pro 1030 Ile Ala Asn Gly Pro 1110 Val	Oliver 1015 Clu Lys Phe 1095 Val Phe Thr	Leu Arg Asp His 1080 Asn Tyr Val	Val 1069 Pro Ile His Pro Cys 1149	Val Ile 1050 Ala Asn Ser Ala Ser 1130 Ala	His Val His Ile 1115 Arg	Cys Ile Trp Arg Thr 1100 Thr Lys Asp	Val Leu Pro 1085 Gln Lys Gln Ile	Arg Ala Gly 1076 Val Thr His Thr Gln 1156	Leu 1055 Cys Pro Arg Ser Arg 1135	Ser Leu Leu Pro 1120 Leu Gln
1170 1175 1180 Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu 1185 1190 1195 1200	Tyr Ser Ala Glu Leu 1109 Lys	101(Gly Ile Ser Thr Leu 109(Ser Lys	Ser Leu Ser 1075 His Met Pro	Asn Ser 1060 Thr Ile Ala Val Asp	Gly Gln 1045 Asn Phe Gln Lys Ile 1125 Ile	Pro 1030 Ile Ala Asn Gly Pro 1110 Val	Oliver 1015 Clu Lys Phe 1095 Val Phe Thr	Leu Arg Asp His 1080 Asn Tyr Val	Val 1069 Pro Ile His Pro Cys 1149	Val Ile 1050 Ala Asn Ser Ala Ser 1130 Ala	His Val His Ile 1115 Arg	Cys Ile Trp Arg Thr 1100 Thr Lys Asp	Val Leu Pro 1085 Gln Lys Gln Ile	Arg Ala Gly 1076 Val Thr His Thr Gln 1156	Leu 1055 Cys Pro Arg Ser Arg 1135	Ser Leu Leu Pro 1120 Leu Gln
1170 1175 1180 Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu 1185 1190 1195 1200	Tyr Ser Ala Glu Leu 1109 Lys Thr	1010 Gly Ile Ser Thr Leu 1090 Ser Lys Ala	Glu Ser Leu Ser 1075 His Met Pro Ile Leu 1155	Asn Ser 1060 Thr Ile Ala Val Asp 1140 His	Gly Gln 1045 Asn Phe Gln Lys Ile 1125 Ile Cys	Pro 1030 Ile S Ala Asn Gly Pro 1110 Val S Leu	Olumber 1015 Glu Lys Phe 1095 Val Phe Thr Glu	Leu Arg Asp His 1080 Asn Tyr Val Thr Lys 1160	Val 1069 Pro Ile His Pro Cys 1149 Asp	Val Ile 1050 Ala Asn Ser Ala Ser 1130 Ala Leu	His Val His Ile 1115 Arg Ala	Cys Ile Trp Arg Thr 1100 Thr Lys Asp	Val Leu Pro 1085 Gln Lys Gln Ile Tyr	Arg Ala Gly 1070 Val Thr His Cln 1150 Leu	Met Leu 1055 Cys Pro Arg Ser Arg 1135 Arg Glu	1040 Ser Ser Leu Leu Pro 1120 Leu Gln
1185 1190 1195 1200	Tyr Ser Ala Glu Leu 1109 Lys Thr	1010 Gly Ile Ser Thr Leu 1090 Ser Lys Ala	Glu Ser Leu Ser 1075 His Met Pro Ile Leu 1155	Asn Ser 1060 Thr Ile Ala Val Asp 1140 His	Gly Gln 1045 Asn Phe Gln Lys Ile 1125 Ile Cys	Pro 1030 Ile S Ala Asn Gly Pro 1110 Val S Leu	Olumber 1015 Glu Lys Phe 1095 Val Phe Thr Glu	Leu Arg Asp His 1080 Asn Tyr Val Thr Lys 1160	Val 1069 Pro Ile His Pro Cys 1149 Asp	Val Ile 1050 Ala Asn Ser Ala Ser 1130 Ala Leu	His Val His Ile 1115 Arg Ala	Cys Ile Trp Arg Thr 1100 Thr Lys Asp	Val Leu Pro 1085 Gln Lys Gln Ile Tyr	Arg Ala Gly 1070 Val Thr His Cln 1150 Leu	Met Leu 1055 Cys Pro Arg Ser Arg 1135 Arg Glu	1040 Ser Ser Leu Leu Pro 1120 Leu Gln
1185 1190 1195 1200	1025 Tyr Ser Ala Glu Leu 1105 Lys Thr Arg Leu	1010 Gly Ile Ser Thr Leu 1090 Ser Lys Ala Phe	Glu Ser Leu Ser 1075 His Met Pro Ile Leu 1155 Asp	Asn Ser 1060 Thr Ile Ala Val Asp 1140 His	Gly Gln 1045 Asn Phe Gln Lys Ile 1125 Ile Cys Thr	Pro 1036 Ile Ala Asn Gly Pro 1116 Leu Thr	1019 Val) Glu Lys Phe 1099 Val) Phe Thr Glu Lys	Leu Arg Asp His 1080 Asn Tyr Val Thr Lys 1160 Glu	Pro Val 1069 Pro Ile His Pro Cys 1149 Asp	Val Ile 1050 Ala Asn Ser Ala Ser Leu Leu	Arg His Val His Ile Arg Arg Leu Leu	Cys Ile Trp Arg Thr 1100 Thr Lys Asp Pro Asn 1180	Val Leu Pro 1085 Gln Lys Gln Ile Tyr 1165 Gly	Arg Ala Gly 1070 Val Thr His Thr Cln 1150 Leu Val	Met Leu 1055 Cys Pro Arg Ser Arg Glu Gly	1040 Ser Ser Leu Leu Pro 1120 Leu Gln Lys
Phe Ser Ser Gly Ala Ile Gln Val Val Val Ala Ser Arg Ser Leu Cys	1025 Tyr Ser Ala Glu Leu 1105 Lys Thr Arg Leu	1010 Gly Ile Ser Thr Leu 1090 Ser Lys Ala Phe	Glu Ser Leu Ser 1075 His Met Pro Ile Leu 1155 Asp	Asn Ser 1060 Thr Ile Ala Val Asp 1140 His	Gly Gln 1045 Asn Phe Gln Lys Ile 1125 Ile Cys Thr	Pro 1036 Ile Ala Asn Gly Pro 1116 Leu Thr	1019 Val) Glu Lys Phe 1099 Val) Phe Thr Glu Lys	Leu Arg Asp His 1080 Asn Tyr Val Thr Lys 1160 Glu	Pro Val 1069 Pro Ile His Pro Cys 1149 Asp	Val Ile 1050 Ala Asn Ser Ala Ser Leu Leu	Arg His Val His Ile Arg Arg Leu Leu	Cys Ile Trp Arg Thr 1100 Thr Lys Asp Pro Asn 1180	Val Leu Pro 1085 Gln Lys Gln Ile Tyr 1165 Gly	Arg Ala Gly 1070 Val Thr His Thr Cln 1150 Leu Val	Met Leu 1055 Cys Pro Arg Ser Arg Glu Gly	1040 Ser Ser Leu Leu Pro 1120 Leu Gln Lys
	Tyr Ser Ala Glu Leu 1105 Lys Thr Arg Leu 1185	1010 Gly Ile Ser Thr Leu 1090 Ser Lys Ala Phe Ser 1170 His	Glu Ser Leu Ser 1075 His Met Pro Ile Leu 1155 Asp	Asn Ser 1060 Thr Ile Ala Val Asp 1140 Ser Gly	Gly Gln 1045 Asn Phe Gln Lys Ile 1125 Cys Thr Leu	Pro 1036 Ile Ala Asn Gly Pro 1116 Leu Thr Leu Ser 1190	Phe 1095 Val Thr Glu Lys Phe 1095 Val Thr Glu Lys	Leu Arg Asp His 1080 Asn Tyr Val Thr Lys Glu Met	Pro Val 1069 Pro Ile His Pro Cys 1149 Asp Thr	Val Ile 1050 Ala Asn Ser Ala Ser Leu Leu Arg	1035 Arg His Val His Ile 1115 Arg Ala Ile Leu	Cys Ile Trp Arg Thr 1100 Thr Lys Asp Pro Asn 1180	Val Leu Pro 1085 Gln Lys Gln Ile Tyr 1165 Gly Val	Arg Ala Gly 1070 Val Thr His Thr (Gln 1150 Leu) Val	Met Leu 1055 Cys Pro Arg Ser Arg Glu Gly Gln	1040 Ser Ser Leu Leu Pro 1120 Leu Gln Lys Tyr Leu 1200

	1205			1210				1215	5
Trp Gly Met A		a Ala F	His Len		le Ile	Met			
	220		1225				1230		
Tyr Tyr Asn G		Hig I			sp Tvr				Asp
191 Tyl ASII G.	Ly Dys II.		1240	VUL 1.	OF -1-	1245		- , -	
Val Leu Gln Me	at Wal Cla			Ara D				Agn	Glu
	et var Gr			AIG F	1260		пор	лор	014
1250	3 77 - 14-4	1255		Com I			Dha	Dha	Tare
Gly Arg Cys Va			GIU GIA	Ser L	ase As pas	ASP	FIIC	FILE	1280
1265	12				275	•	.	*** -	
Lys Phe Leu T		b Leu E			er His	Leu .			
	1285			1290				1299	
Met His Asp H		ı Ala (hr Lys				Asn
	300		1305				1310		
Lys Gln Asp A	la Val Asp	o Tyr I	Leu Thr	Trp T	hr Phe	Leu	Tyr	Arg	Arg
1315			1320			1325			
Met Thr Gln As	n Pro Asi	ı Tyr I	Tyr Asn	Leu G	ln Gly	Ile	Ser	His	Arg
1330		1335			1340				
His Leu Ser A	sp His Lev	ser (Glu Leu	Val G	lu Gln	Thr	Leu	Ser	Asp
1345	135				355				1360
Leu Glu Gln Se	r Lys Cys	: Ile S	Ser Ile	Glu A	sp Glu	Met .	Asp	Val	Ala
	1365			1370				1375	
Pro Leu Asn Le	eu Gly Met	: Ile A	Ala Ala	Tyr T	yr Tyr	Ile .	Asn	Tyr	Thr
	380		1385		-		1390		
Thr Ile Glu Le	eu Phe Sei	Met S	Ser Leu	Asn A	la Lys	Thr	Lys	Val	Arg
1395			1400			1405	=		
Gly Leu Ile G	lu Ile Ile			Ala G	lu Tyr	Glu .	Asn	Ile	Pro
1410		1415			1420				
Ile Arg His H		. Dan I	Tou tou	Arm C	1 - T - 1.	λ 1 ~ .	Cln	Lve	Val
	LS GIU ASI	JASILI	Deu Deu	ALG U	TU PER	мта ч	Gill	_,_	Yaz
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1425	143	30		1	435				1440
	143 u Asn Asr	30		1	435		Val		1440 Thr
1425 Pro His Lys Le	141 au Asn Asr 1445	30 1 Pro I	Lys Phe	1: Asn A: 1450	435 sp Pro	His '	Val	Lys 1455	1440 Thr
Pro His Lys Le	143 eu Asn Asr 1445 eu Gln Ala	30 1 Pro I	Lys Phe	1450 Arg M	435 sp Pro	His '	Val	Lys 1455 Ala	1440 Thr
Pro His Lys Le Asn Leu	143 eu Asn Asr 1445 eu Gln Ala	30 1 Pro I 1 His I	Lys Phe Leu Ser 1465	Asn As 1450 Arg Me	435 sp Pro et Gln	His '	Val Ser 1470	Lys 1455 Ala	1440 Thr Glu
Pro His Lys Leu Leu Leu Gln Ser As	143 eu Asn Asr 1445 eu Gln Ala	30 1 Pro I 1 His I 1 Glu I	Lys Phe Leu Ser 1465 Ile Leu	Asn As 1450 Arg Me	435 sp Pro et Gln ys Ala	His '	Val Ser 1470	Lys 1455 Ala	1440 Thr Glu
Pro His Lys Let Asn Leu Leu Leu Leu Gln Ser As 1475	143 eu Asn Asn 1445 eu Gln Ala 160 sp Thr Glu	30 n Pro I n His I n Glu I	Lys Phe Leu Ser 1465 Ile Leu 1480	Asn	435 sp Pro et Gln ys Ala	His Leu Ile 1	Val Ser 1470 Arg	Lys 1455 Ala Leu	1440 Thr Glu Ile
Asn Leu Leu Leu Cleu Gln Ser Asn Leu Cln Ser Asn Leu Cln Ser Asn 1475	143 eu Asn Asn 1445 eu Gln Ala 160 sp Thr Glu	30 n Pro I n His I n Glu I n Leu S	Lys Phe Leu Ser 1465 Ile Leu 1480	Asn	sp Pro et Gln ys Ala ly Trp	His Leu Ile 1485 Leu	Val Ser 1470 Arg	Lys 1455 Ala Leu	1440 Thr Glu Ile
Pro His Lys Let Asn Leu Leu Leu Leu Gln Ser As 1475 Gln Ala Cys Va 1490	143 eu Asn Asr 1445 eu Gln Ala 660 sp Thr Glu	30 n Pro I n His I n Glu I n Leu S 1495	Lys Phe Leu Ser 1465 Ile Leu 1480 Ser Ser	Asn Asn Asn Asn Asg Moses Experience Asn G	435 sp Pro et Gln ys Ala ly Trp 1500	His Leu :	Val Ser 1470 Arg Ser	Lys 1455 Ala Leu Pro	1440 Thr Glu Ile
Asn Leu Leu Leu Gln Ser As 1475 Gln Ala Cys Va 1490 Leu Ala Ala Me	143 eu Asn Asr 1445 eu Gln Ala 160 sp Thr Glu al Asp Val	30 n Pro I n His I n Glu I Leu S 1495 n Ala C	Lys Phe Leu Ser 1465 Ile Leu 1480 Ser Ser	Asn Asn Asn Asn Asn G	435 sp Pro et Gln ys Ala ly Trp 1500 hr Gln	His Leu :	Val Ser 1470 Arg Ser	Lys 1455 Ala Leu Pro Trp	1440 Thr Glu Ile
Pro His Lys Let Asn Leu Leu Leu Leu Gln Ser As 1475 Gln Ala Cys Vo 1490 Leu Ala Ala Me	143 Eu Asn Asr 1445 Eu Gln Ala 660 Ep Thr Glu al Asp Val Et Glu Leu 153	30 n Pro I n His I n Glu I L Leu S 1495 n Ala C	Lys Phe Leu Ser 1465 Ile Leu 1480 Ser Ser	Asn Asn Asi 1450 Arg Me Ser Ly Asn G	435 sp Pro et Gln ys Ala ly Trp 1500 hr Gln 515	His The Leu File Ala F	Val Ser 1470 Arg Ser Met	Lys 1455 Ala Leu Pro Trp	1440 Thr Glu Ile Ala Ser 1520
Asn Leu Leu Leu Gln Ser As 1475 Gln Ala Cys Va 1490 Leu Ala Ala Me	143 eu Asn Asn 1445 eu Gln Ala 160 sp Thr Glu al Asp Val et Glu Leu 153 vr Leu Lys	30 n Pro I n His I n Glu I L Leu S 1495 n Ala C	Lys Phe Leu Ser 1465 Ile Leu 1480 Ser Ser Gln Met Leu Pro	Asn A: 1450 Arg Me Ser L Asn G: Val Ti His Pi	435 sp Pro et Gln ys Ala ly Trp 1500 hr Gln 515 he Thr	His The Leu File Ala F	Val Ser 1470 Arg Ser Met	Lys 1455 Ala Leu Pro Trp	1440 Thr Glu Ile Ala Ser 1520 Ile
Asn Leu Leu Leu Leu Gln Ser As 1475 Gln Ala Cys Vo 1490 Leu Ala Ala Me 1505 Lys Asp Ser Ty	143 Eu Asn Asr 1445 Eu Gln Ala 660 Ep Thr Glu al Asp Val Et Glu Leu 153 Vr Leu Lys 1525	30 1 Pro I 2 His I 1 Glu I 1 Leu S 1495 1 Ala C 10 5 Gln I	Lys Phe Leu Ser 1465 Ile Leu 1480 Ser Ser Gln Met Leu Pro	Asn A: 1450 Arg Me Ser L: Asn G: Val T: His P: 1530	435 sp Pro et Gln ys Ala ly Trp 1500 hr Gln 515 he Thr	His Leu : 11e : 1485 Leu : Ala : Ser :	Val Ser 1470 Arg Ser Met	Lys 1455 Ala Leu Pro Trp His 1535	1440 Thr Glu Ile Ala Ser 1520 Ile
Asn Leu Leu Leu Gln Ser As 1475 Gln Ala Cys Va 1490 Leu Ala Ala Me 1505 Lys Asp Ser Ty	142 eu Asn Asn 1445 eu Gln Ala 160 sp Thr Glu al Asp Val et Glu Leu 153 vr Leu Lys 1525 ar Asp Lys	30 1 Pro I 2 His I 1 Glu I 1 Leu S 1495 1 Ala C 10 5 Gln I	Lys Phe Leu Ser 1465 Ile Leu 1480 Ser Ser Gln Met Leu Pro	Asn A: 1450 Arg M: Ser L: Asn G: Val T: His P: 1530 , Ser V:	435 sp Pro et Gln ys Ala ly Trp 1500 hr Gln 515 he Thr	His Leu : 11e : 1485 Leu : Ala : Ser (Val Ser 1470 Arg Ser Met Glu	Lys 1455 Ala Leu Pro Trp His 1535 Met	1440 Thr Glu Ile Ala Ser 1520 Ile
Asn Leu Leu Leu Leu Gln Ser Asn 1475 Gln Ala Cys Van 1490 Leu Ala Ala Men 1505 Lys Asp Ser Ty	143 eu Asn Asn 1445 eu Gln Ala 660 sp Thr Glu al Asp Val et Glu Leu 1527 r Leu Lys 1525 ar Asp Lys	30 1 Pro I a His I l Leu S 1495 1 Ala C 10 5 Gln I	Lys Phe Leu Ser 1465 Ile Leu 1480 Ser Ser Gln Met Leu Pro Val Glu 1545	Asn A: 1450 Arg M: Ser L: Asn G: Val Ti His Pi 1530 Ser V:	sp Pro et Gln ys Ala ly Trp 1500 hr Gln 515 he Thr	His Leu : 11e : 1485 Leu : Ala : Ser : Asp	Val Ser 1470 Arg Ser Met Glu Ile:	Lys 1455 Ala Leu Pro Trp His 1535 Met	1440 Thr Glu Ile Ala Ser 1520 Ile Glu
Asn Leu Leu Leu Leu Gln Ser As 1475 Gln Ala Cys Va 1490 Leu Ala Ala Me 1505 Lys Asp Ser Ty Lys Arg Cys The Met Glu Asp G	143 eu Asn Asn 1445 eu Gln Ala 660 sp Thr Glu al Asp Val et Glu Leu 1527 r Leu Lys 1525 ar Asp Lys	30 1 Pro I 1 Glu I 1 Leu S 1495 1 Ala C 2 Gln I 5 Gly V 3 Asn A	Lys Phe Leu Ser 1465 Ile Leu 1480 Ser Ser Gln Met Leu Pro Val Glu 1545 Ala Leu	Asn A: 1450 Arg M: Ser L: Asn G: Val Ti His Pi 1530 Ser V:	sp Pro et Gln ys Ala ly Trp 1500 hr Gln 515 he Thr al Phe	His Leu : 11e : 1485 Leu : Ala : Ser : Asp	Val Ser 1470 Arg Ser Met Glu Ile:	Lys 1455 Ala Leu Pro Trp His 1535 Met	1440 Thr Glu Ile Ala Ser 1520 Ile Glu
Asn Leu Leu Leu Cleu Gln Ser As 1475 Gln Ala Cys Va 1490 Leu Ala Ala Me 1505 Lys Asp Ser Ty Lys Arg Cys Th	143 eu Asn Asn 1445 eu Gln Ala 660 sp Thr Glu et Glu Leu 1525 er Asp Lys 640 eu Glu Arg	30 1 Pro I a His I l Leu S 1495 1 Ala C 10 5 Gln I 5 Gly V	Lys Phe Leu Ser 1469 Ile Leu 1480 Ser Ser Gln Met Leu Pro Val Glu 1545 Ala Leu	Asn A: 1450 Arg M: Ser L: Asn G: Val T: 1: His P! 1530 Ser V: Leu G:	sp Pro et Gln ys Ala ly Trp 1500 hr Gln 515 he Thr al Phe ln Leu	His Leu : 11e : 1485 Leu : Ala : Ser : Asp Thr : 1565	Val Ser 1470 Arg Ser Met Glu Ile: 1550 Asp	Lys 1455 Ala Leu Pro Trp His 1535 Met	1440 Thr Glu Ile Ala Ser 1520 Ile Glu Glu
Asn Leu Leu Leu Leu Gln Ser As 1475 Gln Ala Cys Va 1490 Leu Ala Ala Ma 1505 Lys Asp Ser Ty Lys Arg Cys Th Met Glu Asp Gl 1555 Ile Ala Asp Va	143 eu Asn Asn 1445 eu Gln Ala 660 sp Thr Glu et Glu Leu 1525 er Asp Lys 640 eu Glu Arg	30 1 Pro I 2 His I 3 Leu S 1 Ala C 5 Gln I 5 Gly V 7 Asn A	Lys Phe Leu Ser 1469 Ile Leu 1480 Ser Ser Gln Met Leu Pro Val Glu 1545 Ala Leu	Asn A: 1450 Arg M: Ser L: Asn G: Val T: 1: His P! 1530 Ser V: Leu G:	435 sp Pro et Gln ys Ala ly Trp 1500 hr Gln 515 he Thr al Phe ln Leu yr Pro	His Leu Ile 1485 Leu Ala Ser Asp Thr 1565 Asn	Val Ser 1470 Arg Ser Met Glu Ile: 1550 Asp	Lys 1455 Ala Leu Pro Trp His 1535 Met	1440 Thr Glu Ile Ala Ser 1520 Ile Glu Glu
Asn Leu Leu Leu Cleu Gln Ser As 1475 Gln Ala Cys Va 1490 Leu Ala Ala Me 1505 Lys Asp Ser Ty Met Glu Asp Gl 1555 Ile Ala Asp Va 1570	eu Asn Asr 1445 eu Gln Ala 660 sp Thr Glu al Asp Val et Glu Leu 1525 er Leu Lys 1525 er Asp Lys 640 eu Glu Arg	30 1 Pro I 2 His I 2 Glu I 3 Leu S 1495 1 Ala C 10 5 Gln I 5 Gly V 1 Asn F 1 Phe C 1575	Lys Phe Leu Ser 1465 Ile Leu 1480 Ser Ser Gln Met Leu Pro Val Glu 1545 Ala Leu 1560 Cys Asn	Asn A: 1450 Arg M: Ser L: Asn G: Val T: His P: 1530 Ser V: Leu G: Arg T:	sp Pro et Gln ys Ala ly Trp 1500 hr Gln 515 he Thr al Phe ln Leu yr Pro 1580	His Leu Ile 1485 Leu Ile	Ser 1470 Arg Ser Met Glu Ile: 1550 Asp	Lys 1455 Ala Leu Pro Trp His 1535 Met Ser	1440 Thr Glu Ile Ala Ser 1520 Ile Glu Glu Leu
Asn Leu Leu Leu Leu Gln Ser Asn 1475 Gln Ala Cys Van 1490 Leu Ala Ala Men 1505 Lys Asp Ser Ty Lys Arg Cys The Ser Ty Met Glu Asp Glu A	143 eu Asn Asn 1445 eu Gln Ala 660 sp Thr Glu et Glu Leu 1525 eu Lys 1525 eu Asp Lys 640 eu Glu Arg	30 1 Pro I 2 His I 3 His I 4 Leu S 1495 1 Ala C 5 Gln I 5 Gly V 1 S Asn A 1 S S S S S S S S S S S S S S S S S S S	Lys Phe Leu Ser 1465 Ile Leu 1480 Ser Ser Gln Met Leu Pro Val Glu 1545 Ala Leu 1560 Cys Asn	Asn A: 1450 Arg M: Ser L: Asn G: Val T: 1: His P! 1530 Ser V: Leu G: Arg T: Leu G:	sp Pro et Gln ys Ala ly Trp 1500 hr Gln 515 he Thr al Phe ln Leu yr Pro 1580 rg Ser	His Leu Ile 1485 Leu Ile	Ser 1470 Arg Ser Met Glu Ile: 1550 Asp	Lys 1455 Ala Leu Pro Trp His 1535 Met Ser	1440 Thr Glu Ile Ala Ser 1520 Ile Glu Glu Leu Val
Asn Leu Leu Leu Cleu Gln Ser As 1475 Gln Ala Cys Va 1490 Leu Ala Ala Me 1505 Lys Asp Ser Ty Met Glu Asp Gl 1555 Ile Ala Asp Va 1570 Ser Tyr Glu Va 1585	eu Asn Asn 1445 eu Gln Ala 660 sp Thr Glu et Glu Leu 1525 er Asp Lys 640 eu Glu Arg	30 1 Pro I 1 His I 1 Glu I 1 Leu S 1495 1 Ala C 10 5 Gly V 1 Asn F 1 I 1 Phe C 1575 1 Lys F	Lys Phe Leu Ser 1465 Ile Leu 1480 Ser Ser Gln Met Leu Pro Val Glu 1545 Ala Leu 1560 Cys Asn Asp Ser	Asn A: 1450 Arg M: Ser L: Asn G: Val T: 1:1530, Ser V: Leu G: Arg T: Ile A:	sp Pro et Gln ys Ala ly Trp 1500 hr Gln 515 he Thr al Phe ln Leu yr Pro 1580 rg Ser	His Leu : 11e : 1485 Leu : Ala : Ser : Asp Thr : 1565 Asn	Ser 1470 Arg Ser Met Glu Ile: 1550 Asp	Lys 1455 Ala Leu Pro Trp His 1535 Met Ser Glu	1440 Thr Glu Ile Ala Ser 1520 Ile Glu Gln Leu Val 1600
Asn Leu Leu Leu Leu Gln Ser Asn 1475 Gln Ala Cys Van 1490 Leu Ala Ala Men 1505 Lys Asp Ser Ty Lys Arg Cys The Ser Ty Met Glu Asp Glu A	143 eu Asn Asn 1445 eu Gln Ala 660 sp Thr Glu et Glu Leu 153 er Leu Lys 1525 eu Glu Arg 640 eu Glu Arg	30 1 Pro I 1 His I 1 Glu I 1 Leu S 1495 1 Ala C 10 5 Gly V 1 Asn F 1 I 1 Phe C 1575 1 Lys F	Lys Phe Leu Ser 1465 Ile Leu 1480 Ser Ser Gln Met Leu Pro Val Glu 1545 Ala Leu 1560 Cys Asn Asp Ser	Asn A: 1450 Arg M: Ser L: Asn G: Val T: His P: 1530, Ser V: Leu G: Arg T: Ile A: Glu G:	sp Pro et Gln ys Ala ly Trp 1500 hr Gln 515 he Thr al Phe ln Leu yr Pro 1580 rg Ser	His Leu : 11e : 1485 Leu : Ala : Ser : Asp Thr : 1565 Asn	Ser 1470 Arg Ser Met Glu Ile: 1550 Asp	Lys 1455 Ala Leu Pro Trp His 1535 Met Ser Glu Pro	1440 Thr Glu Ile Ala Ser 1520 Ile Glu Gln Leu Val 1600 Val
Asn Leu Leu Leu Gln Ser Asn 1475 Gln Ala Cys Va 1490 Leu Ala Ala Me 1505 Lys Asp Ser Ty Met Glu Asp Gr 1555 Ile Ala Asp Va 1570 Ser Tyr Glu Va 1585 Val Val Leu Va	143 eu Asn Asn 1445 eu Gln Ala 660 sp Thr Glu et Glu Leu 1525 eu Lys 1525 eu Glu Arg al Ala Arg al Val Asp	30 1 Pro I 1 His I 1 Glu I 1 Leu S 1495 1 Ala C 10 3 Gln I 5 Gly V 1 Asn F 1 1575 2 Lys F 20 1 Glu F	Lys Phe Leu Ser 1465 Ile Leu 1480 Ser Ser Gln Met Leu Pro Val Glu 1545 Ala Leu 1560 Cys Asn Asp Ser	Asn A: 1450 Arg M: Ser L: Asn G: Val T: 1: His P: 1530 Leu G: Arg T: Ile A: Glu G: 1610	sp Pro et Gln ys Ala ly Trp 1500 hr Gln 515 he Thr al Phe ln Leu yr Pro 1580 rg Ser 595	His Leu Ile 1485 Leu Ile	Ser 1470 Arg Ser Met Glu 11e: 1550 Asp Ile	Lys 1455 Ala Leu Pro Trp His 1535 Met Ser Glu Pro Pro	1440 Thr Glu Ile Ala Ser 1520 Ile Glu Gln Leu Val 1600 Val
Asn Leu Leu Leu Cleu Gln Ser Asn 1475 Gln Ala Cys Van 1490 Leu Ala Ala Men 1505 Lys Asp Ser Ty Met Glu Asp Glou Ser Tyr Glu Van 1570 Ser Tyr Glu Van 1585 Val Val Leu Van Ile Ala Pro Leu Van Ileu Van Il	eu Asn Asn 1445 eu Gln Ala 660 sp Thr Glu et Glu Leu 1525 eu Lys 1525 eu Glu Arg 1540 eu Glu Arg 1560 eu Glu Arg 1560 eu Glu Leu 1560 eu Phe Pro	30 1 Pro I 1 His I 1 Glu I 1 Leu S 1495 1 Ala C 10 3 Gln I 5 Gly V 1 Asn F 1 1575 2 Lys F 20 1 Glu F	Lys Phe Leu Ser 1465 Ile Leu 1480 Ser Ser Gln Met Leu Pro Val Glu 1545 Ala Leu 1560 Cys Asn Asp Ser Arg Glu Lys Arg	Asn A: 1450 Arg M: Ser L: Asn G: Val T: His P: 1530, Ser V: Leu G: Arg T: Ile A: Glu G: 1610 Glu G:	sp Pro et Gln ys Ala ly Trp 1500 hr Gln 515 he Thr al Phe ln Leu yr Pro 1580 rg Ser 595	His Leu : 11e : 1485 Leu : Ala : Ser : Asp Thr : 1565 Asn Gly : Thr :	Ser 1470 Arg Ser Met Glu Ile: 1550 Asp Ile: Gly Gly Trp:	Lys 1455 Ala Leu Pro Trp His 1535 Met Ser Glu Pro Pro	1440 Thr Glu Ile Ala Ser 1520 Ile Glu Gln Leu Val 1600 Val
Asn Leu Leu Leu Cleu Gln Ser Asn 1475 Gln Ala Cys Van 1490 Leu Ala Ala Men 1505 Lys Asp Ser Ty Met Glu Asp Glou Ser Tyr Glu Van 1570 Ser Tyr Glu Van 1585 Val Val Leu Van Ile Ala Pro Leu Van Ileu Van Il	143 eu Asn Ass 1445 eu Gln Ala 660 sp Thr Glu et Glu Leu 153 er Leu Lys 1525 eu Glu Arg al Ala Arg al Val Ass al Val Ass 1605 eu Phe Pro	30 1 Pro I 1 His I 1 Glu I 1 Leu S 1495 1 Ala C 10 3 Gln I 5 Gly V 1 Asn F 1 S 1 S 2 Lys F 3 O 3 Gln I 6 Gln I	Lys Phe Leu Ser 1465 Ile Leu 1480 Ser Ser Gln Met Leu Pro Val Glu 1545 Ala Leu 1560 Cys Asn Asp Ser Arg Glu Lys Arg 1625	Asn A: 1450 Arg M: Ser L: Asn G: Val T: 1: 1530 Ser V: Leu G: Arg T: Ile A: 1: Glu G: 1610 Glu G:	sp Pro et Gln ys Ala ly Trp 1500 hr Gln 515 he Thr al Phe ln Leu yr Pro 1580 rg Ser 595 lu Val	His Leu Ile	Ser 1470 Arg Ser Met Glu Ile: 1550 Asp Ile: Gly Gly Trp: 1630	Lys 1455 Ala Leu Pro Trp His 1535 Met Ser Glu Pro Pro 1615 Val	1440 Thr Glu Ile Ala Ser 1520 Ile Glu Gln Leu Val 1600 Val Val

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1640
       1635
Leu Gln Gln Lys Ala Lys Val Lys Leu Asp Phe Val Ala Pro Ala Thr
                                           1660
                       1655
Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly
                                       1675
                   1670
Cys Asp Gln Glu Tyr Lys Phe Ser Val Asp Val Lys Glu Ala Glu Thr
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                                    1690
               1685
Asp Ser Asp Ser Asp
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agacacccct cgaagcagtg gtgcctctag catcttcgac ctgaggaacc tggcagctga
180
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agocottoga oggoagoaco ggoocooggo cotgettoco ototacoogg cacetgacga
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ggatgaagec ggggaacget gtageegeet agagecacce cegegageae tttggacaaa
ggatcttggt caagtgtctg tcgctcaagt tcgagattga aattgagccc atctttggga
420
tettggetet gtatgatgtg eggaagaaaa agaagatete ggaaaaette taettegace
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586
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1
Glu Val Phe Arg Asp Leu Leu Phe Leu Pro His Ile Ile Gln Ser Gln
                                25
            20
Asp Pro Lys Asp Gly Leu Asn Phe Asn Leu Glu Leu Glu Arg Gln Thr
                            40
Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly
                                            60
                       55
Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly
                                        75
                    70
Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala
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90
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Gly Pro His Leu Leu Gly Pro Pro Ala Leu Ala Glu Arg Ala Thr Met
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           100
Ser Gln Leu Pro Gly Ser Ser Gly Arg Arg Cys
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gggaggaget gaggtecaag eceteeteea gtgeateace etggteagga gtggggeagt
gtggagccag gggctcttca gccagcacct gctgcactat gggctccagc tgtgcaagac
cacccgtgag aaggagtctt gttgggagca gggtggggaa gcactgtggg agaggtgtcc
ttggctcggg tagcagggac cttgatgtat cttgaagcca gggggccgac tgaggcgctt
gtctgaaggc ctccatgaga gggaggggc tggagggggc tgttcccaat aatagctcta
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421
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Thr Ser Arg Ser Leu Leu Pro Glu Pro Arg Thr Pro Leu Pro Gln Cys
                                                   30
           20
                               25
Phe Pro Thr Leu Leu Pro Thr Arg Leu Leu Leu Thr Gly Gly Leu Ala
       35
                           40
Gln Leu Glu Pro Ile Val Gln Gln Val Leu Ala Glu Glu Pro Leu Ala
                       55
                                            60
Pro His Cys Pro Thr Pro Asp Gln Gly Asp Ala Leu Glu Glu Gly Leu
                                        75
                   70
Asp Leu Ser Ser Ser Leu Ser Ala Pro Asp His Phe Gln Gly Leu Ser
                                   90
               85
Pro Ser Trp Pro Ala Leu Leu Arg Pro Lys Arg Ser Val Trp Gly Ala
           100
                               105
Ser Ser Trp Leu Gln Trp Asp Thr Gly Val Pro Ser
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<210> 2239
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1648

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<213> Homo sapiens
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agccattcca ggcctgggcc catggtcacc ccacacaata aggctaagag tccaggtgtc
aggcagccag gcagcagctc tagctcagcc cctgggcagc ccagcacagg ggttgctcga
cccacagtta gttctggccc tgtgcctagg cgccagaatg gcagctccag ctcaggacct
gagcgatcaa tcagtgggtc caagaagcca accaatgact caaatccctc taggcggaca
gtcagtggta catgtggccc tggacaacct gcaagcagct caggtggccc tgggcgaccc
atcagtggtt cagttagttc tgcaagaccc ttgggcagct ctcgtggccc tggccggcct
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Leu Ser His Pro Ser His Ser Arg Pro Gly Pro Met Val Thr Pro His
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                                                    30
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Asn Lys Ala Lys Ser Pro Gly Val Arg Gln Pro Gly Ser Ser Ser
                                                45
                            40
Ser Ala Pro Gly Gln Pro Ser Thr Gly Val Ala Arg Pro Thr Val Ser
                                            60
                        55
    50
Ser Gly Pro Val Pro Arg Arg Gln Asn Gly Ser Ser Ser Ser Gly Pro
                    70
Glu Arg Ser Ile Ser Gly Ser Lys Lys Pro Thr Asn Asp Ser Asn Pro
                                    90
                85
Ser Arg Arg Thr Val Ser Gly Thr Cys Gly Pro Gly Gln Pro Ala Ser
                                105
            100
Ser Ser Gly Gly Pro Gly Arg Pro Ile Ser Gly Ser Val Ser Ser Ala
                                                125
                            120
        115
Arg Pro Leu Gly Ser Ser Arg Gly Pro Gly Arg Pro Val Ser Ser Pro
                        135
His Glu Leu Arg Arg Pro Val Ser Gly Leu Gly Pro Pro Gly Arg Ser
                                        155
                    150
Val Ser Gly Pro Gly Arg Ser Ile Ser Gly Pro Ile Pro Ala Gly Arg
```

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170
Thr Val Ser Asn Ser Val Pro Gly Arg Pro Val Ser Ser Leu Gly Pro
                                185
           180
Gly Gln Thr Val Ser Ser Ser Gly Pro Thr Ile Lys Pro Lys Cys
       195
                            200
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120
acctacatta gaaccccggg aaggggcgag gaaccagtgt tcatggtgac agggcgacgg
gaggacgtgg ccacagcccg gcgggaaatc atctcagcag cggagcactt ctccatgatc
cgtgcctccc gcaacaagtc aggcgccgcc tttggtgtgg ctcctgctct gcccggccag
gtgaccatcc gtgtgcgggt gccctaccgc gtggtggggc tggtggtggg ccccaaaggg
gcaaccatca agcgcatcca gcagcaaacc aacacataca ttatcacacc aagccgtgac
420
cgcgaccccg tgttcgagat cacgggtgcc ccaggcaacg tggagcgtgc gcgcgaggag
atcgagacgc acatcgcggt gcgcactggc aagatcctcg agtacaacaa tgaaaacgac
540
treetggegg ggageceega egeageaate gatageeget acteegaege etggegggtg
600
caccageceg getgeaagee eetetecace tteeggeaga acageetggg etgeag
656
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<211> 218
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<213> Homo sapiens
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                                     10
1
Thr Ser Glu His Val Ala Glu Ile Val Gly Arg Gln Gly Cys Lys Ile
                                25
            20
Lys Ala Leu Arg Ala Lys Thr Asn Thr Tyr Ile Arg Thr Pro Gly Arg
                                                 45
        35
Gly Glu Glu Pro Val Phe Met Val Thr Gly Arg Arg Glu Asp Val Ala
                        55
Thr Ala Arg Arg Glu Ile Ile Ser Ala Ala Glu His Phe Ser Met Ile
Arg Ala Ser Arg Asn Lys Ser Gly Ala Ala Phe Gly Val Ala Pro Ala
                                     90
Leu Pro Gly Gln Val Thr Ile Arg Val Arg Val Pro Tyr Arg Val Val
```

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105
Gly Leu Val Val Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln
                                               125
                           120
Gln Thr Asn Thr Tyr Ile Ile Thr Pro Ser Arg Asp Arg Asp Pro Val
                       135
                                           140
Phe Glu Ile Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu
                                       155
                   150
Ile Glu Thr His Ile Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn
                                  170
                                                       175
              165
Asn Glu Asn Asp Phe Leu Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser
                                                   190
                               185
Arg Tyr Ser Asp Ala Trp Arg Val His Gln Pro Gly Cys Lys Pro Leu
                                                205
                           200
       195
Ser Thr Phe Arg Gln Asn Ser Leu Gly Cys
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                       215
<210> 2243
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<212> DNA
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gattcatttc ctggtaagaa tcttctgact tattgagctg catgtcagaa gcaaaaagca
aaaaaaccaa atatgtacat aaaacagtgt tatcatteet taaaagagaa ggaaaataaa
tccctaaata atgtggactg gaacacagaa atccaaggct ggccgcacgg gtcctggctg
ggatggcatc cggggagctg ctgctgggga cgtgcttgcc ggcacaggtc aggggagccg
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ggttetgeet ceteettgee cactetettt gegeeeteee tgtgetegee tgtettgttt
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Trp Ala Arg Arg Gln Asn Pro Ala Pro Leu Thr Cys Ala Gly Lys
                                25
           20
His Val Pro Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
                            40
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
                                            60
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
                                       75
                   70
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu
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95
                                    90
Asp Ser Tyr Gln Glu Met Asn Pro Gln Ser Phe Ser
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           100
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<212> DNA
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120
gaggcccaca agcatttcac gtggcgtcat ggcgaggctg acgcggtggg catggtgttt
geggeegaae tgtegeaeeg gtacetggga etgteegatg aggtegttge gegeaeeege
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540
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632
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<211> 153
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                                25
            20
Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp
                            40
Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu
                        55
                                             60
Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg
                    70
Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys
                                    90
Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val
                                105
Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys
```

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120
       115
Pro Gly Gln Val Ala Met Ile Val Asp Pro Asp Glu Ala Ala Leu Ala
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                                            140
  130
Glu Cys Tyr Asp Arg Cys Ser Ala Arg
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<210> 2247
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cetettaate ttggcegeac ageacetggg agetttaaat agaceeecac geeetgggeg
coccaccge tgacccacce gatetcaget etgeetttee egeetetetg etgggttgea
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tgtgccgtgt gagccatccc cctg
324
<210> 2248
<211> 105
<212> PRT
<213> Homo sapiens
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Tyr Ser Arg Gly Trp Glu Ser Leu Ala Tyr Ala Thr Gln Gln Arg Gly
                                25
Gly Lys Gly Arg Ala Glu Ile Gly Trp Val Ser Gly Gly Gly Ala Gln
                           40
Gly Val Gly Val Tyr Leu Lys Leu Pro Gly Ala Val Arg Pro Arg Leu
                       55
                                           60
Arg Gly Thr Ala Pro Asn Cys Pro Gly Asn Ser Asp Cys Thr Arg His
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                                        75
Ser Pro Arg Pro Thr Ser Leu Leu Pro Leu Gly Arg Leu Ala Ser Ser
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Val Gly Glu Asn Pro Gly Gly Glu Arg
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coggetttte tecegacege gtgcagggtg ggetgegetg ggeetgggag gaactgggag
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Ala Arg Gly Arg Glu Lys Ser Arg Glu Gly Ala Lys Pro Asn Ser Cys
Lys Phe His His Thr Gly Gly Arg Leu Thr Leu Pro Phe Lys Gly Pro
Phe Arg Leu Lys Glu Ala Asp Phe Asn Ser Leu Ala Ala Val Ser Thr
                                          60
Val Gly Met Gly Lys Pro Arg Gly Ser Gln Leu Asn Cys Phe Leu Thr
                                      75
65
                   70
Phe Pro Cys Gly Leu Ser Trp Leu Leu Pro Glu Leu Arg Gly Leu
               85
                                  90
                                                      95
Tyr Thr Pro Cys Tyr Pro Val Phe
           100
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gtggaatagt caggttaaat ttaatgtgac cgtttatcgc aatctgccga ccactcgcga
120
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420
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teggtteega etaceeteee gaetgeetat gatgtttate etttggatgg tegeeatgat
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            20
Gln Thr Pro Lys Ala Thr Ser Ser Thr Leu Tyr Phe Asp Ser Leu Thr
                             40
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Val Asn Ala Gly Asn Gly Gly Phe Leu His Cys Ile Gln Met Asp Thr
                                             60
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Ser Val Asn Ala Ala Asn Gln Val Val Ser Val Gly Ala Asp Ile Ala
                                         75
                    70
65
Phe Asp Ala Asp Pro Lys Phe Phe Ala Cys Leu Val Arg Phe Glu Ser
                                     90
                85
Ser Ser Val Pro Thr Thr Leu Pro Thr Ala Tyr Asp Val Tyr Pro Leu
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Asp Gly Arg His Asp Gly Gly Tyr Tyr Thr Val Lys Asp Cys Val Thr
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Ile Asp Val Leu Pro Arg Thr
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 agegeegeca egeegaggae egeeteaceg aatacetggg ceaactggaa gatategtet
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1655

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           20
Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr
                                                45
                            40
Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu
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                        55
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Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala
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Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys
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Leu Thr Ala Leu
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<212> DNA
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cctgtacagg gcagtgcagc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat
actogictia aggagotigg tiggaogota cictigoagg igcaigaiga agigalactg
gaagggcctt cagagtctgc ggagtnggcc aagtccatag ttgttgagtg catgtctaag
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<212> PRT
<213> Homo sapiens
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Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His
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Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp
                           40
                                                45
       35
Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys
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    50
Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu
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70
Glu Gly Pro Ser Glu Ser Ala Glu Xaa Ala Lys Ser Ile Val Val Glu
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Cys Met Ser Lys Pro Phe Tyr Gly Thr Asn Ile Leu Arg Val Asp Leu
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Ala Val Asp Ala Lys Cys Ala
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<212> DNA
<213> Homo sapiens
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gtatatctac atgaagaatt acagcaggac atgcaaaagt ttaagaatga ggtcaacaca
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Pro Asp Ser Asp Arg Thr Ser Glu Val Tyr Leu His Glu Glu Leu Gln
Gln Asp Met Gln Lys Phe Lys Asn Glu Val Asn Thr Leu Glu Glu Glu
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Phe Leu Ala Leu Lys Lys Glu Asn Val Gln Leu His Lys Glu Val Glu
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                                        75
Glu Glu Met Glu Lys His Arg Ser Asn Ser Thr Glu Leu Ser Gly Thr
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90
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Leu Thr Asp Gly Thr Thr Val Gly Asn Asp Asp Gly Leu Asn Gln
                               105
           100
Gln Ile Pro Arg Lys Glu Asn Glu Glu His Asp Arg Pro Ala Asp Lys
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                           120
Thr Ala Asn Glu Lys Asn Lys Val Lys Asn Gln Ile Tyr Pro Glu Ala
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                    . 135
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Asp Phe Ala Asp Ser Met Glu Pro Ser Glu Ile Ala Ser Glu Asp Cys
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Glu Leu Ser His Ser Val Tyr Glu Asn Phe Met Leu Leu Ile Glu Gln
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Leu Arg Met Glu Tyr Lys Gly Arg Thr Thr Ala
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240
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Leu Ser Gly Pro Arg Gln Gly Asp Lys Thr Ile Tyr Ala Glu Asp Gly
                                25
Arg Val Leu Tyr Gly Thr Pro Ile Glu Gly Phe Thr Val Asp Lys Ala
                            40
Lys Leu Asn Ser Leu Cys Met Val Gly Glu Met Glu Cys Phe Val Gln
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Pro Val Glu Asn Asp Pro Ser Val Leu Val Leu Gly Ala Gly His Val
Ser Arg Ala Ile Thr Asp Leu Leu Leu Phe Ile Gly Cys Arg Val Thr
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90
                85
Val Val Asp Asp Arg Pro Glu Tyr Val Val Pro Glu Phe Phe Asp Glu
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Arg Val Thr Arg Lys Cys Leu Pro Leu Glu Asn Phe Lys Asn Asp Leu
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                            120
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Pro Leu Asp Glu Tyr Asn Gly Phe Ile Ile Val Thr Arg
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<212> DNA
<213> Homo sapiens
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Asn Pro Met Ser Ser Arg Asn Gly Phe Gln Ala Thr Asp Leu Ala Leu
                            40
Ile Ala Val Phe Ala Ala Leu Ile Ala Val Leu Ala Val Ile Pro Pro
                                            60
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Met Phe Met Val Gly Ala Val Pro Phe Ala Leu Gln Met Val Ala Val
                                        75
                    70
Met Leu Ala Pro Met Val Leu Gly Ser Ile Arg Gly Gly Cys Ala Val
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90
Gly Leu Tyr Ile Leu Val Gly Ala Leu Gly Leu Pro Val Phe Ser Gly
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Gly Ser Ser Gly Ile Gly Val Leu Val Gly Pro Thr Gly Gly Tyr Leu
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                                                125
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Trp Gly Trp Leu Ile Gly Ala Phe Val Ala Gly
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<212> DNA
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gctatttcac gtggggttcc ggttatcccg attgctttag taggagcatg ggcggctatg
240
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Arg Ser Pro Arg Ser His Arg Gly Met Ala Gly Ser Leu Leu Thr Asp
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                                25
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Gly Val Pro Leu Leu Ile Phe Pro Glu Gly Thr Arg Ser Arg Thr Gly
                            40
Ala Met Gly Thr Phe Lys Pro Gly Ala Ala Leu Ala Ile Ser Arg
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   50
Gly Val Pro Val Ile Pro Ile Ala Leu Val Gly Ala Trp Ala Ala Met
                    70
                                        75
Pro Ser Glu Gln Ala Arg Leu Pro Lys Gly Arg Pro Leu Val His Val
                                    90
                85
Ala Ile Gly His Pro Met Asp Pro Val Pro Gly Glu Ile Ala His Gln
            100
                                105
Phe Ser Glu Arg Ile Arg Arg Gln Val Ile Glu Leu His Asp Gln Thr
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125
                           120
Ala Arg Ala Tyr Gly Met Pro Thr Leu Asp Glu Tyr Gly Arg His Arg
                                         140
                       135
  130
Ala Leu Ser Gln Ala Ser Glu Ser Gly Asp Thr Ala Ser Thr Asn His
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Ser Thr Cys
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<211> 328
<212> DNA
<213> Homo sapiens
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cataccaccc gagaggagga gagggtggtg ggagaaatca gatcagagtt caaaatgcac
cggaaggget cggaaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata
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<212> PRT
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                               25
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Glu Leu Pro Leu Ser Ile Asp Ala Tyr His Pro Arg Gly Gly Glu Gly
                                                45
                           40
Gly Gly Arg Asn Gln Ile Arg Val Gln Asn Ala Pro Glu Gly Leu Gly
                                           60
                        55
    50
Asn Val Arg Leu His Leu Ala Gly Thr Val Asn Ala Thr Thr Asn Ile
                                      . 75
                    70
Thr His Leu Arg Gln Ala Leu Glu Ser Ser Cys Glu His Asn Ser Leu
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 <210> 2267
 <211> 370
 <212> DNA
 <213> Homo sapiens
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Ser Gln Lys Gln Val Thr Glu Gly Ala Thr Thr Glu Leu His Ser Arg
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Trp Gly Val Lys Pro Tyr Pro Pro Lys Thr Ala Val Thr Gly Val Ala
                            40
                                                45
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Asn Leu Tyr Arg Asp Arg Leu Lys Ala Thr Ala Thr Gln Gly Thr Glu
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Met Val Lys Gln Ala Cys Pro Lys Ala Ser Leu Leu Asn Pro Asp Leu
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Glu Gly Gln Glu Thr Ser His Leu Arg Met Leu
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<212> DNA
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420
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            20
                                25
Ile Gly Val Asn Ala Gly Ser Leu Asp Lys Arg Leu Leu Asp Lys Tyr
                                                45
        35
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Gly Ala Pro Thr Ala Glu Ala Met Val Glu Ser Ala Leu Trp Glu Ala
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Ser Leu Phe Glu Gln Tyr Gly Phe Arg Asp Phe Lys Ile Ser Val Lys
                                        75
                    70
His His Asp Pro Val Val Met Ile Arg Ala Tyr Glu Gln Leu Ala Ala
                                    90
Lys Cys Asp Tyr Pro Leu His Leu Gly Val Thr Glu Ala Gly Pro Ala
                               105
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Phe Gln Gly Thr Ile Lys Ser Ala Val Ala Phe Gly His Leu Leu Ala
                                                125
                            120
Glu Gly Ile Gly Asp Thr Ile Arg Val Ser Leu Ser Ala Asp Pro Val
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                        135
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Glu Glu Val Lys Val Gly Ile Lys Ile Leu Glu Ser Leu Asn Leu Arg
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Pro Arg Gly Leu Glu Ile Val Ser Cys
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<210> 2271
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420
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<212> PRT
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                                25
Leu Leu Lys Thr Arg Thr Ser Glu Glu Gly Met Ala Pro Leu Thr Ser
                                                45
       35
                            40
Asp Ala Val Ala Arg Leu Ala Thr Tyr Ser Ala Arg Leu Ala Asp His
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Gln Gly Arg Val Ser Ala Arg Ile Gly Asp Leu Phe Gln Leu Val Ser
Glu Ala Asp Phe Ile Arg His Leu Ala Gly Asp Glu Met Thr Asp Ala
                                    90
                85
Gly His Ile Glu Arg Ala Leu Lys Ala Lys Ala Thr Arg Thr Gly Arg
                                105
                                                    110
Val Ser Ala Arg Ile Leu Asp Asp Met Leu Ala Gly Val Ile Leu Ile
                                                125
                            120
       115
Asp Thr Ala Gly Ala Ala Val Gly Lys Cys Asn Gly Leu Thr Val Leu
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                                            140
Glu Val Gly Asp Ser Ala Phe Gly Val Pro Ala Arg Ile Ser Ala Thr
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                   150
145
Val Tyr Pro Gly Gly Ser Gly Ile Val Asp Ile Glu Arg Glu Val Asn
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Leu Gly Gln Pro Ile His Ser Lys Gly Val Met Ile Leu Thr Gly
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300
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Asn	Phe	His	Glu	Asp	Leu	Ser	Tyr	Gly	Pro	Ser	Glu	Glu	Pro	Asp	Leu
	1170	١				1175	5				1180)			
Asp	Leu	Ala	Gly	Thr	Gly	Asp	Arg	Thr	Pro	Pro	Pro	His	ser	His	Pro
1105	:				1190)				119	5				1200
Ala	Ala	Pro	Ser	Thr	Gly	Ser	Pro	Val	Pro	Ala	Thr	Glu	Pro	Pro	Ala
				1209	5				1210)				1215	>
Ala	Lvs	Glu	Glu	Gly	Val	Leu	Gly	Pro	Trp	Ser	Pro	Ser	Pro	Trp	Pro
	-		1220	n				1225	,				1230)	
Ser	Gln	Ala	Gly	Arq	Ser	Pro	Pro	Pro	Pro	Ser	Glu	Gln	Thr	Pro	Gly
		123	5				1240)				1245	5		
Asn	Pro	Leu	Ile	Asn	Phe	Leu	Pro	Glu	Glu	Asp	Thr	Pro	Ile	Gly	Ala
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Pro	Asp	Leu	Glv	Leu	Pro	Ser	Leu	Ser	Trp	Pro	Arg	Val	Ser	Thr	Asp
126	5				1270)				127	5				1280
Glv	Leu	Gln	Thr	Pro	Ala	Thr	Pro	Glu	Ser	Gln	Asn	Asp	Phe	Pro	Val
														300	_
				128	5				1290	0				129	
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			130	Gln 0	Ser			Pro 1305	Pro	Pro		Arg	Gly	Arg 0	Thr
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Asn His Gly 134 Gly Val Pro Glu Leu 142 Gly	Glu Leu 133 Ser 5 Gly Asp Pro Pro 141 Gln 5 Leu Pro	Val 131 Pro 0 Thr Ser Ile 139 Gly 0 Thr	130 Phe 5 Pro His Val 138 Ala 5 Thr Val 146	Gln 0 Lys Arg Ser Alaa136 Leu 0 Pro Alaa : Met 144 - Leu	Asp Pro Ser 135 Trp Trp Leu Ser Val 143 Pro 5 Ser	Asp Ser 133' Pro 0 Glu Pro Pro Phe 141 Trp 0 Glu Pro	Glu 1322 Ser 5 Ser Pro Thr Glu 140 Pro 5 Gly Pro	Pro 1305 Glu 0 Thr Pro Ala Val 1385 Met 0 Ala Thr Ala Val 146	Pro Pro Leu Asp Leu 137 Gly Lys Pro Phe Leu 145 Pro 5	Pro Lys Pro Val 135 Glu 0 Val Gly Leu 143 Asn 0 Leu	Pro 134 Ala 5 Gly Ala Arg 142 Pro 142 Pro 5 Pro	Arg 132: Leu 0 Glu Gly Ser Asp 140 Gly Thr Gly Ser	1311 Gly 5 Ser Leu Leu 139 Ser 5 Ser Thr Pro	Arg O Ala Pro Trp Gly 137 Leu O Ser Trp Leu Lys 145 Leu 0	Thr Pro Val Thr 1360 Pro Fro Leu Asp Thr 1440 Gly Leu
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Asn His Gly 134 Gly Val Pro Glu Leu 142 Gly Gln Ser	Glu Leu 133 Ser 5 Gly Asp Pro Pro 141 Gln 5 Leu Pro	Val 131 Pro 0 Thr Ser Ile 139 Gly 0 Thr Gly Glu	130 Phe 5 Pro His Val 138 Ala 5 Thr Val Ser 146 Ala 5	Gln Lys Arg Ser Ala 136 Leu 0 Pro Ala : Met 144 : Leu 0 Trp	Asp Pro Ser 135 Trp 5 Trp Leu Ser Val 143 Pro 5 Ser Asp	Asp Ser 133' Pro 0 Glu Pro Pro Phe 141 Trp 0 Glu Pro	Glu 1322 Ser 5 Ser Pro Thr Glu 140 Pro 6 Gly Pro Glu Pro 148	Pro 1305 Glu 0 Thr Pro Ala 1385 Met 0 Ala Thr Ala Val 146 Ala 0	Pro Pro Leu Asp Leu 137 Gly Lys Pro Phe Leu 145 Pro S Asn	Pro Pro Lys Pro Val 135 Glu 0 Val Val Gly Leu 143 As n 0 Leu Ser	Gly Pro 134 Ala 5 Gly Ala Arg Pro 142 Pro 5 Pro	Arg 132: Leu 0 Glu Gly Ser Asp 140 Gly Thr Gly Ser Arg 148	1311 Gly 5 Ser Leu Leu 139 Ser 5 Ser Thr Pro Arg 147 Val	Arg Arg Arg Ala Pro Trp Gly 137 Leu Ser Trp Leu Lys 145 Leu Pro	Thr Pro Val Thr 1360 Pro 5 Pro Leu Asp Thr 1440 Gly 5 Leu Glu
Asn His Gly 134 Gly Val Pro Glu Leu 142 Gly Gln Ser	Glu Leu 133 Ser 5 Gly Asp Pro Pro 141 Gln 5 Leu Pro	Val 131 Pro 0 Thr Ser Ile 139 Gly 0 Thr Gly Glu	130 Phe 5 Pro His Val 138 Ala 5 Thr Val Ser 146 Ala 5	Gln Lys Arg Ser Ala 136 Leu 0 Pro Ala : Met 144 : Leu 0 Trp	Asp Pro Ser 135 Trp 5 Trp Leu Ser Val 143 Pro 5 Ser Asp	Asp Ser 133' Pro 0 Glu Pro Pro Phe 141 Trp 0 Glu Pro	Glu 1322 Ser 5 Ser Pro Thr Glu 140 Pro 6 Gly Pro Glu Pro 148	Pro 1305 Glu 0 Thr Pro Ala 1385 Met 0 Ala Thr Ala Val 146 Ala 0	Pro Pro Leu Asp Leu 137 Gly Lys Pro Phe Leu 145 Pro S Asn	Pro Pro Lys Pro Val 135 Glu 0 Val Val Gly Leu 143 As n 0 Leu Ser	Gly Pro 134 Ala 5 Gly Ala Arg Pro 142 Pro 5 Pro	Arg 132: Leu 0 Glu Gly Ser Asp 140 Gly Thr Gly Ser Arg 148	1311 Gly 5 Ser Leu Leu 139 Ser 5 Ser Thr Pro Arg 147 Val	Arg Arg Arg Ala Pro Trp Gly 137 Leu Ser Trp Leu Lys 145 Leu Pro	Thr Pro Val Thr 1360 Pro Fro Leu Asp Thr 1440 Gly Leu

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Cys Ser Thr Thr Cys Gly Leu Gly Ala Val Trp Arg Pro Val Arg Cys
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Ser Ser Gly Arg Asp Glu Asp Cys Ala Pro Ala Gly Arg Pro Gln Pro
        1540 1545
                               1550
Ala Arg Arg Cys His Leu Arg Pro Cys Ala Thr Trp His Ser Gly Asn
     1555 1560 1565
Trp Ser Lys Cys Ser Arg Ser Cys Gly Gly Gly Ser Ser Val Arg Asp
  1570 1575 1580
Val Gln Cys Val Asp Thr Arg Asp Leu Arg Pro Leu Arg Pro Phe His
    1590 1595
Cys Gln Pro Gly Pro Ala Lys Pro Pro Ala His Arg Pro Cys Gly Ala
      1605 1610 1615
Gln Pro Cys Leu Ser Trp Tyr Thr Ser Ser Trp Arg Glu Cys Ser Glu
               1625 1630
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     1635 1640
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Gly Leu Cys Glu Glu Ala Leu Arg Pro Asn Thr Thr Arg Pro Cys Asn
                        1660
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Thr His Pro Cys Thr Gln Trp Val Val Gly Pro Trp Gly Gln Cys Ser
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      1670
Ala Pro Cys Gly Gly Gly Val Gln Arg Arg Leu Val Lys Cys Val Asn
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Thr Gln Thr Gly Leu Pro Glu Glu Asp Ser Asp Gln Cys Gly His Glu
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Ala Trp Pro Glu Ser Ser Arg Pro Cys Gly Thr Glu Asp Cys Glu Pro
    1715 1720 1725
Val Glu Pro Pro Arg Cys Glu Arg Asp Arg Leu Ser Phe Gly Phe Cys
   1730 1735 1740
Glu Thr Leu Arg Leu Leu Gly Arg Cys Gln Leu Pro Thr Ile Arg Thr
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Gly His Gln Arg Val Ala Arg Arg
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            20
Ile Phe Leu Tyr Gly Pro Cys Ser Ser Gln Pro Leu Ile Leu Glu Leu
                                                 45
                            40
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Gly Thr Gly Ser Ala Thr Ser Met Leu Leu Ser Cys Cys Ser Pro Ala
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Trp Asn Val Pro Tyr Leu Ala Asn Ser Tyr Cys Ser Ser Val Thr Leu
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                    70
Leu Asp Thr Phe Leu Pro Leu Ser Leu Val Arg Cys Ser Pro Leu Gly
                                     90
                85
Ser His Gly Pro Leu Cys Val Pro Val Val Ala Gln Gln Lys Pro Pro
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                                105
            100
Ala Asp Gly Trp Val Ser Cys Pro Glu His Gly Ser Leu Arg Ala Glu
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180
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Ile Asp Tyr Thr Gly Gly Leu Lys His Gln Ile Leu Gln Ser His Gly
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Gln Asp Ala Glu Leu Ser Gly Thr Leu Ser Leu Val Leu Thr Gln Gly
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540
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                               25
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Lys Ala Val Gly Ser Asp Arg Ala Glu Asp Leu Gly Pro Gln Glu
                           40
                                                45
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile
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Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val
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Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala
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Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val
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Arg Tyr Val Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser
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Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp
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300
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Met Lys Pro Thr Glu Glu Ile Lys Arg Gln Phe Gln Gly Leu His Trp
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                            40
Leu Gly Arg Lys Tyr Gly Leu Asn His Gly Glu Phe Tyr Leu Asp Asp
Glu Gln Trp Ala Thr Leu Met Ala Gly Ser Ser Phe Glu Ala Asn Pro
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Arg Ile Lys Ser Asn Phe Asp Ser Glu Gly Ala Val Val Asp Pro Asp
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Ala Cys Leu
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Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
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Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
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                           105
         100
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
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                      120
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Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
                                        140
                    135
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
                                   155
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Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
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                                170
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Asp Trp Leu Phe Thr Arg
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<400> 2297
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gaattttccc acgttggggg ggggggttc ggactttttc ccccaaaaac ccccccccc
aaaggaaaaa cccctttttt tttttttt ttttatacac atgagggtct ctggttaata
aatgttgaga tgtagggtta ggtgagatta aacaggttct ttttttcatg atttctcgga
gtotttatga tgotcoacac cagtacttot caaagotgac tgtgtataca aaacactggg
gatetgacce acatgtaaag tetgatttet ttggtetggg geaggeetga aatn
414
<210> 2298
<211> 67
<212> PRT
<213> Homo sapiens
<400> 2298
Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Phe Gly Leu Phe
               5
1
Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
                              25
           20
Pro Lys Pro Pro Gly Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
                          40
Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn
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60
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Val Glu Met
65
<210> 2299
<211> 987
<212> DNA
<213> Homo sapiens
<400> 2299
ngagatgtct aagttatttt ttttttcccg gaaggcaaat ggctggcgtg gaagcacaac
cogettteae tettegaatt tgtgettage tettttettg taccetgega etegtgacea
acatgetgtg atgtgtgeeg agggaggaat tggteageta cacaacetgg atettaceae
agtttggata tgactgaggc tetecaatgg gecagatate actggegaeg getgateaga
240
ggtgcaacca gggatgatga ttcagggcca tacaactatt cctcgttgct cgcctgtggg
cgcaagtcct ctcagatccc taaactgtca ggaaggcacc ggattgttgt tccccacatc
cagocottoa aggatgagta tgagaagtto tooggagoot atgtgaacaa togaataoga
420
acaacaaagt acacacttot gaattttgtg ccaagaaatt tatttgaaca atttcacaga
gctgccaatt tatatttcct gttcctagtt gtcctgaact gggtaccttt ggtagaagcc
ttccaaaagg aaatcaccat gttgcctctg gtggtggtcc ttacaattat cgcaattaaa
gatggcctgg aagattatcg gaaatacaaa attgacaaac agatcaataa tttaataact
660
aaagtttata gtaggaaaga gaaaaaatac attgaccgat gctggaaaga cgttactgtt
ggggacttta ttegeetete etgeaacgag gteatecetg cagacatggt actaetettt
tecactgate cagatggaat etgteacatt gagaettetg gtettgatgg agagageaat
ttaaaacaga ggcaggtggt tcggggatat gcagaacagg actctgaagt tgatcctgag
aagttttcca gtaggataga atgtgaaagc ccaaacaatg acctcagcag attccgaggc
ttcctagaac attccaacaa agaacgc
987
<210> 2300
<211> 266
<212> PRT
<213> Homo sapiens
<400> 2300
Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile
Arg Gly Ala Thr Arg Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser
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25
Leu Leu Ala Cys Gly Arg Lys Ser Ser Gln Ile Pro Lys Leu Ser Gly
                          40
Arg His Arg Ile Val Val Pro His Ile Gln Pro Phe Lys Asp Glu Tyr
                       55
Glu Lys Phe Ser Gly Ala Tyr Val Asn Asn Arg Ile Arg Thr Thr Lys
                                      75
                   70
Tyr Thr Leu Leu Asn Phe Val Pro Arg Asn Leu Phe Glu Gln Phe His
                                  90
Arg Ala Ala Asn Leu Tyr Phe Leu Phe Leu Val Val Leu Asn Trp Val
                              105
           100
Pro Leu Val Glu Ala Phe Gln Lys Glu Ile Thr Met Leu Pro Leu Val
                                               125
                          120
      115
Val Val Leu Thr Ile Ile Ala Ile Lys Asp Gly Leu Glu Asp Tyr Arg
                                           140
                       135
Lys Tyr Lys Ile Asp Lys Gln Ile Asn Asn Leu Ile Thr Lys Val Tyr
                                      155
                  150
Ser Arg Lys Glu Lys Lys Tyr Ile Asp Arg Cys Trp Lys Asp Val Thr
                                                      175
                                  170
               165
Val Gly Asp Phe Ile Arg Leu Ser Cys Asn Glu Val Ile Pro Ala Asp
                               185
           180
Met Val Leu Leu Phe Ser Thr Asp Pro Asp Gly Ile Cys His Ile Glu
                                             205
                           200
Thr Ser Gly Leu Asp Gly Glu Ser Asn Leu Lys Gln Arg Gln Val Val
                                         220
                      215
Arg Gly Tyr Ala Glu Gln Asp Ser Glu Val Asp Pro Glu Lys Phe Ser
                                    235
                  230
Ser Arg Ile Glu Cys Glu Ser Pro Asn Asn Asp Leu Ser Arg Phe Arg
                                   250
              245
Gly Phe Leu Glu His Ser Asn Lys Glu Arg
            260
<210> 2301
<211> 390
<212> DNA
<213> Homo sapiens
<400> 2301
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nncgccacct cttccgcgna tttccctgaa gcctgcgata acactatgga aatcgctgag
nncgttgcca cgttgaattc aacacaaacg caanactaca tgcccgattt ccccaccccg
gagggggaga atgaggaatc ctggttcgtc aaagaagttg aacgcggttt gcactaccga
ttccccgagg gcattcccga tgacgtacgc aagcaggcag attatgaagt agggattatt
acceagatgg gatteceegg ctacttettg gtggtegegg attttateaa etgggegaag
aataacggaa ttcgagtggg ccccgggcgt
390
<210> 2302
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<211> 130
<212> PRT
<213> Homo sapiens
<400> 2302
Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser
                                    10
Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys
                                25
            20
Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr
                                                45
                            40
Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn
                                            60
                        55
Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg
                    70
                                        75
Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu
                85
                                    90
Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val
                                                    110
                                105
Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro
                                                125
                            120
Gly Arg
    130
<210> 2303
<211> 638
<212> DNA
<213> Homo sapiens
<400> 2303
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gcacctgtgt ttggctacct gggcgaccga catagccgca aggctaccat gagcttcggt
atottgctgt ggtcaggagc tggcctctct agctccttca tctccccccg gtattcttgg
ctettettee tgtcccgggg catcgaggge actggetegg ccagetacte caccategeg
cccaccgtcc tgggcgacct cttcgtgagg gaccagcgca cccgcgtgct ggctgtcttc
tacatettta teecegttgg aagtggtetg ggetacgtge tgggggtegge tgtgacgatg
ctgactggga actggcgctg ggccctccga gtcatgccct gcctggaggc cgtggccttg
atcctgctta tcctgctggt tccagaccca ccccggggag ctgccgagac acagggggag
ggggccgtgg gaggcttcag aagcagctgg tgtgaggacg tcagatacct ggggaaaaac
tggagttttg tgtggtcgac cctcggagtg accgccatgg cctttgtgac tggagccctg
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638
<210> 2304
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1688

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<211> 212
<212> PRT
<213> Homo sapiens
<400> 2304
Xaa Asp Pro Gly Cys Pro Cys Val Ser Pro Ser Val Phe Val Ser Cys
                                  10
Leu Leu Leu Ser Ala Pro Val Phe Gly Tyr Leu Gly Asp Arg His Ser
                                                  30
                              25
         20
Arg Lys Ala Thr Met Ser Phe Gly Ile Leu Leu Trp Ser Gly Ala Gly
                          40
Leu Ser Ser Ser Phe Ile Ser Pro Arg Tyr Ser Trp Leu Phe Phe Leu
                      55
                                        60
 50
Ser Arg Gly Ile Glu Gly Thr Gly Ser Ala Ser Tyr Ser Thr Ile Ala
                                     75
                  70
Pro Thr Val Leu Gly Asp Leu Phe Val Arg Asp Gln Arg Thr Arg Val
                                  90
              85
Leu Ala Val Phe Tyr Ile Phe Ile Pro Val Gly Ser Gly Leu Gly Tyr
                             105
          100
Val Leu Gly Ser Ala Val Thr Met Leu Thr Gly Asn Trp Arg Trp Ala
                          120
                                             125
      115
Leu Arg Val Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile
                                          140
                     135
Leu Leu Val Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu
                  150
                                    155
Gly Ala Val Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr
                                170
              165
Leu Gly Lys Asn Trp Ser Phe Val Trp Ser Thr Leu Gly Val Thr Ala
                              185
Met Ala Phe Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu
                           200
       195
Leu Glu Ala Arg
    210
<210> 2305
<211> 340
<212> DNA
<213> Homo sapiens
<400> 2305
geocegeet etatetteeg geategteae agtegeateg tgaeggtaet ggetggagte
toggaccago acaetttgac ogtogtggto gootogtgac atggggtaac gogaacotog
togotoctgt tottgacoto ttoogtgood coattgacaa cgategggca agttcactgg
cccgcaacgc tattggtgac gcagcactcg cagetggtet cgaccgactc gtccacacca
cggcgtcggt gcgcgacgag ggcgatgagt tggtcgtcgt tactcgcagc gctgctgccg
ccgcacgcaa ttccatgacg acaacgtgga gttggcgcgc
<210> 2306
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1689

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<211> 101
<212> PRT
<213> Homo sapiens
<400> 2306
Met Glu Leu Arg Ala Ala Ala Ala Leu Arg Val Thr Thr Asn
Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser
                                25
           20
Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu
                           40
Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly
                                            60
                       55
Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser
                                        75
                   70
Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys
                                    90
Asp Asp Ala Gly Arg
           100
<210> 2307
<211> 360
<212> DNA
<213> Homo sapiens
<400> 2307
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gccaaggcac tgggtggggc tggcagtggg agcaagggct cagcaggtgg cggaagcaag
cgacggctga gcagcgaaga cagctccctg gagccagacc tggccgagat gagcctggat
gacagcagcc tggccctggg cgcagaggcc aggaccttcg ggggattccc tgagagccct
ccaccetgte etetecacgg tggetecega ggecetteca ettteettee tgageceeca
gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaaac caaagaggca
<210> 2308
<211> 120
<212> PRT
<213> Homo sapiens
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Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro
                                    10
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Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys
                                                    30
                                25
           20
Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser
                                                45
                            40
Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu
                        55
Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro
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75
                   70
Pro Pro Cys Pro Leu His Gly Gly Ser Arg Gly Pro Ser Thr Phe Leu
                                    90
               85
Pro Glu Pro Pro Asp Thr Tyr Glu Glu Asp Gly Asp Glu Ser Gly Asn
           100
                                105
Gly Leu Pro Lys Thr Lys Glu Ala
                           120
       115
<210> 2309
<211> 395
<212> DNA
<213> Homo sapiens
<400> 2309
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cactetetge cetgggeege ggggeetgae tgggtteeca ceteeteeta eecactgggg
tettttecag caggeacagg gatteeteat gggggaggea gageecacce gtetgteete
ggtgacggcc tgagctgtgc acggcctccc ctgccctcct gttctcaggc cccccagggt
ccatccagcc ccagcgtgtg gcgttctggc tcttccctgg agtctcctcc cagaccacgc
gactccactc acactgtgcc tagcggactg tgtggttgat gcagccggct cacttgagtg
tgttgtgtta tgcccacaac aggcttgccg tcacc
395
<210> 2310
<211> 108
<212> PRT
<213> Homo sapiens
<400> 2310
Met Gly Pro Cys Ser Glu His Ile Pro Met Arg Ala Ala Cys Pro Val
                                    10
His Ser Leu Pro Trp Ala Ala Gly Pro Asp Trp Val Pro Thr Ser Ser
                                                    30
                               25
           20
Tyr Pro Leu Gly Ser Phe Pro Ala Gly Thr Gly Ile Pro His Gly Gly
                           40
Gly Arg Ala His Pro Ser Val Leu Gly Asp Gly Leu Ser Cys Ala Arg
                        55
                                            60
   50
Pro Pro Leu Pro Ser Cys Ser Gln Ala Pro Gln Gly Pro Ser Ser Pro
                                        75
                    70
Ser Val Trp Arg Ser Gly Ser Ser Leu Glu Ser Pro Pro Arg Pro Arg
                                    90
               85
Asp Ser Thr His Thr Val Pro Ser Gly Leu Cys Gly
                                105
            100
<210> 2311
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 <212> DNA
 <213> Homo sapiens
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<400> 2311
gtgcacgccg agatgctgcc gcaagacaag cagcgtgtcg tcggcgagtt gaagcgccag
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120
gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc
gtccttcacg gacgggtggg ggacgtcttc gcgatgatcg ccctatcgaa gcgaaccatg
240
gccaacattc gacagaacat cgcgatcgcg atcgggctaa aggcggtgtt ccttgtaacg
accgtcgtcg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag
cttgtgacca tgaacgcg
378
<210> 2312
<211> 126
<212> PRT
<213> Homo sapiens
<400> 2312
Val His Ala Glu Met Leu Pro Gln Asp Lys Gln Arg Val Val Gly Glu
                                    10
1
Leu Lys Arg Gln Gly Phe Ser Val Ile Lys Val Gly Asp Gly Ile Asn
                                                    30
                                25
            20
Asp Cys Asp Ala Leu Ala Ala Ala Asp Val Gly Ser Pro Met Gly Gly
                                                45
                            40
       35
Ser Ala Asp Val Ala Leu Glu Thr Ala Asp Ala Ala Val Leu His Gly
                                             60
                        55
    50
Arg Val Gly Asp Val Phe Ala Met Ile Ala Leu Ser Lys Arg Thr Met
                                        75
65
                    70
Ala Asn Ile Arg Gln Asn Ile Ala Ile Ala Ile Gly Leu Lys Ala Val
                                                         95
                                    90
                85
Phe Leu Val Thr Thr Val Val Gly Ile Thr Gly Leu Trp Pro Ala Ile
                                105
Leu Ala Asp Thr Gly Thr Thr Glu Leu Val Thr Met Asn Ala
                                                125
                            120
        115
<210> 2313
<211> 669
<212> DNA
<213> Homo sapiens
<400> 2313
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atccgaatca tggctcgtcc tggttggcct ggaaccatta acgtacgcct cacccatcgc
120
ttaagegaeg ceggtetage tgtegaagte acegegegea atgteggtae gacagegggg
ccgcttggat acgcagcaca cccctatctc tgtctgggtg gcaccatcga cgactggaca
240
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gregacgeee egretacete gregeracag gregargare ggergerace aargeagarg
cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat
accgettaca cegtgaaagg aggaeggaae egteggateg eeegeatgge gtateegggt
420
ctcaacggtg aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc
tacactccag acgaccgcca cagtctggcc atcgagccaa tgacctgcgg cccagatgca
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660
ttcacgcgt
669
<210> 2314
<211> 206
<212> PRT
<213> Homo sapiens
<400> 2314
Leu Val Ala Trp Ser Arg Trp Ser Leu Val Glu His Thr Asp Thr Ser
                                  10
Val Thr Gln Thr Ile Arg Ile Met Ala Arg Pro Gly Trp Pro Gly Thr
                                25
           20
Ile Asn Val Arg Leu Thr His Arg Leu Ser Asp Ala Gly Leu Ala Val
                                               45
                            40
        35
Glu Val Thr Ala Arg Asn Val Gly Thr Thr Ala Gly Pro Leu Gly Tyr
                       55
Ala Ala His Pro Tyr Leu Cys Leu Gly Gly Thr Ile Asp Asp Trp Thr
                                        75
                    70
65
Val Asp Ala Pro Phe Thr Ser Trp Leu Gln Val Asp Asp Arg Leu Leu
                                    90
               85
Pro Met Gln Met Arg Glu Met Asp Ser Ile His Ala Leu Asn Gly Leu
                               105
            100
Thr Gly Gly Gln Arg Thr Phe Asp Thr Ala Tyr Thr Val Lys Gly Gly
                          120
                                               125
       115
Arg Asn Arg Arg Ile Ala Arg Met Ala Tyr Pro Gly Leu Asn Gly Glu
                                            140
                     135
Thr Ser His Glu Leu Trp Gly Asp Ala Ala Met Ser Trp Val Gln Val
                                       155
                   150
Tyr Thr Pro Asp Asp Arg His Ser Leu Ala Ile Glu Pro Met Thr Cys
                                   170
                165
Gly Pro Asp Ala Phe Asn Glu Gly Pro Thr His Gly Asp Val Ile Arg
                               185
Leu Glu Pro Gly Asn Asp Val Thr Leu His Trp Gly Ile Ala
                                                205
                            200
<210> 2315
<211> 546
<212> DNA
<213> Homo sapiens
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<400> 2315
nacgegtece teategatae egageeeggg atgggaaaae gggtgtateg egttgaggee
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ccggtacatg aactgtttga ccgagtgcgc cgcagcttag accgagtgcg tgaacagggg
180
cacaacgtct actacgacga acagcgtgca tggcttgacg attactgggc aacggctgat
gttgaggtcg agggtgcccc gaccggtatt cagcaggctg tcaggtggaa ccttttccag
300
attgctcagg catcagcccg tgcagatcaa cttggcattc cggcaaaggg tgtaaccggg
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420
tacactcatc caagaatcgc tgagaatgcg ctgagattcc gggtgaatac ccttccgcaa
getegacgee gggetaagga attgtetgaa egaggegeee tttteeegtg gegaacaate
540
accggt
546
<210> 2316
<211> 182
<212> PRT
<213> Homo sapiens
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Xaa Ala Ser Leu Ile Asp Thr Glu Pro Gly Met Gly Lys Arg Val Tyr
                                    10
1
                 5
Arg Val Glu Ala Thr Gln Gly Arg Pro Ile Arg Ile Asp Lys Ala Val
                                25
            20
Ala Tyr His Thr Ser Arg Gly Val Pro Val His Glu Leu Phe Asp Arg
                                                45
                            40
        35
Val Arg Arg Ser Leu Asp Arg Val Arg Glu Gln Gly His Asn Val Tyr
                                            60
                       55
    50
Tyr Asp Glu Gln Arg Ala Trp Leu Asp Asp Tyr Trp Ala Thr Ala Asp
                                        75
                    70
Val Glu Val Glu Gly Ala Pro Thr Gly Ile Gln Gln Ala Val Arg Trp
                                                        95
                                    90
                85
Asn Leu Phe Gln Ile Ala Gln Ala Ser Ala Arg Ala Asp Gln Leu Gly
            100
                                105
Ile Pro Ala Lys Gly Val Thr Gly Ser Gly Tyr Glu Gly His Tyr Phe
                                                125
                            120
        115
Trp Asp Thr Glu Val Tyr Val Ile Pro Met Leu Thr Tyr Thr His Pro
                                            140
                        135
Arg Ile Ala Glu Asn Ala Leu Arg Phe Arg Val Asn Thr Leu Pro Gln
                                        155
                    150
Ala Arg Arg Arg Ala Lys Glu Leu Ser Glu Arg Gly Ala Leu Phe Pro
                                    170
                165
Trp Arg Thr Ile Thr Gly
            180
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<210> 2317
<211> 496
<212> DNA
<213> Homo sapiens
<400> 2317
gccggcggc tcgggaacgg tcactgacct gcagcaggca atggcggtcg cggtttaatc
agggttctgc acggagtttt ggatagtccg tccagtcgcc actggcaagg cgcgaccagg
cagctgctga cgctgctgtg atgccgagga gatcggagac gattcgtggg tgcatctgcc
180
gggtcagttc gatcagcgcg gtcgttcgag cgcttcctga acgcagcccc tgctggcgca
240
gacgtcggct gagtgggcct ggtgtgagat gcaaccccgg attcctgcca ggaaagagcc
300
atccctcggg tcggtgtctc gatgtgtcag cgagctcggc gatcgcattc ccgaggacct
cgggcagttc gattggctcg gctccgatgg tgagcttccc cggtcgtgat gtcacgtcga
cctgctcacg ggtgagcgcg acgatgcgag tgaggtggag gccgtagagg agcacgagca
acccagcggc acgcgt
496
<210> 2318
<211> 108
<212> PRT
<213> Homo sapiens
<400> 2318
Met Pro Arg Arg Ser Glu Thr Ile Arg Gly Cys Ile Cys Arg Val Ser
                 5
                                    10
Ser Ile Ser Ala Val Val Arg Ala Leu Pro Glu Arg Ser Pro Cys Trp
            20
Arg Arg Arg Leu Ser Gly Pro Gly Val Arg Cys Asn Pro Gly Phe
                            40
Leu Pro Gly Lys Ser His Pro Ser Gly Arg Cys Leu Asp Val Ser Ala
                        55
                                            60
   50
Ser Ser Ala Ile Ala Phe Pro Arg Thr Ser Gly Ser Ser Ile Gly Ser
                                        75
                    70
Ala Pro Met Val Ser Phe Pro Gly Arg Asp Val Thr Ser Thr Cys Ser
                                    90
Arg Val Ser Ala Thr Met Arg Val Arg Trp Arg Pro
                                105
            100
<210> 2319
<211> 1748
<212> DNA
<213> Homo sapiens
<400> 2319
ntgatcaagt ctcggtctct ggattatacc tttgttcctc gaacttggat ctttcctgct
60
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120	aattccaaaa				
tttatagtga 180	aaccagctaa	tggtgcaatg	ggtcatggga	tttctttgat	aagaaatggt
	catctcagga	tcatttgatt	gttcaagaat	acattgaaaa	gcctttccta
atggaaggtt	acaagtttga	cttacgaatt	tatattctgg	ttacatcgtg	tgatccacta
	tctaccatga	tgggcttgtg	cgaatgggta	cagagaagta	cattccacct
	atttgaccca	gttatacatg	catctgacaa	actactccgt	gaacaagcat
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tttacagaat 540	tccttcaagc	aaatcaacat	gatgttgcta	agttttggag	tgatatttca
	taaagaccct	gattgtagca	gaacctcatg	tectgeatge	ctatcgaatg
tgtagacctg	gtcaacctcc	aggaagċgaa	agtgtctgct	ttgaagtcct	gggatttgat
	atagaaaact	aaagccatgg	cttctggaga	ttaaccgagc	cccaagcttt
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	tctatggtca	aaattcaatt	aaaaggctct	taccaggete	ctcagactgg
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	agatotoacg	agaagaacat	gaaaatcgac	atatggggaa	ttatagacga
	ctgaagataa	agcattactt	gaaaagtatg	aaaatttgtt	agctgttgcc
	teetttcagg	aagagcagct	tcattccagc	gagagttgaa	taatcctttg
	aggaagaaga	tattttggat	cttctggagc	aatgtgaaat	tgatgatgaa
aagttgatgg 1260	gaaaaactac	caagactcga	ggaccaaagc	ctctgtgttc	tatgcctgag
agtactgaga 1320	taatgaaaag	accaaagtac	tgcagcagtg	acagcagtta	tgatagtagc
1380	cagaatctga				
1440	catataatct				
tccataagac 1500	gttcagtcag	ctgccctcgg	tccatctctg	ctcaatcacc	ttccagtggg
gacacccgcc	cattttctgc	tcaacaaatg	atatctgtgt	cacggccaac	ttctgcatct
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Lys Lys Lys Arg Lys Gln Lys Thr Phe Ile Val Lys Pro Ala Asn Gly
                       40
Ala Met Gly His Gly Ile Ser Leu Ile Arg Asn Gly Asp Lys Leu Pro
                     55
                                    60
Ser Gln Asp His Leu Ile Val Gln Glu Tyr Ile Glu Lys Pro Phe Leu
                70
Met Glu Gly Tyr Lys Phe Asp Leu Arg Ile Tyr Ile Leu Val Thr Ser
                        90
Cys Asp Pro Leu Lys Ile Phe Leu Tyr His Asp Gly Leu Val Arg Met
         100 105
                                     110
Gly Thr Glu Lys Tyr Ile Pro Pro Asn Glu Ser Asn Leu Thr Gln Leu
    115 120 125
Tyr Met His Leu Thr Asn Tyr Ser Val Asn Lys His Asn Glu His Phe
                                      140
          135
Glu Arg Asp Glu Thr Glu Asn Lys Gly Ser Lys Arg Ser Ile Lys Trp
                                   155
         150
Phe Thr Glu Phe Leu Gln Ala Asn Gln His Asp Val Ala Lys Phe Trp
                               170
                                                 175
Ser Asp Ile Ser Glu Leu Val Val Lys Thr Leu Ile Val Ala Glu Pro
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                           185
          180
His Val Leu His Ala Tyr Arg Met Cys Arg Pro Gly Gln Pro Pro Gly
                                         205
                        200
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Ser Glu Ser Val Cys Phe Glu Val Leu Gly Phe Asp Ile Leu Leu Asp
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                                      220
Arg Lys Leu Lys Pro Trp Leu Leu Glu Ile Asn Arg Ala Pro Ser Phe
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                                  235
Gly Thr Asp Gln Lys Ile Asp Tyr Asp Val Lys Arg Gly Val Leu Leu
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Asn Ala Leu Lys Leu Leu Asn Ile Arg Thr Ser Asp Lys Arg Arg Asn
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                           265
          260
Leu Ala Lys Gln Lys Ala Glu Ala Gln Arg Arg Leu Tyr Gly Gln Asn
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                                          285
       275
Ser Ile Lys Arg Leu Leu Pro Gly Ser Ser Asp Trp Glu Gln Gln Arg
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                                      300
His Gln Leu Glu Arg Arg Lys Glu Glu Leu Lys Glu Arg Leu Ala Gln
                                   315
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Val Arg Lys Gln Ile Ser Arg Glu Glu His Glu Asn Arg His Met Gly
                               330
             325
Asn Tyr Arg Arg Ile Tyr Pro Pro Glu Asp Lỳs Ala Leu Leu Glu Lys
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340
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Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg
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Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys
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                                         380
Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu
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                                     395
Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys
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                                410
              405
Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser
                             425
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Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Glu Ser Asp Glu
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                          440
Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr
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                                         460
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Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser
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Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser
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Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser
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Val Ser Arg Pro Thr Ser Ala Ser Arg Ser His Ser Leu Asn Pro Gly
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Leu Pro Pro Thr
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agtocaggac accatoacag agcagtaett coettgtgag atacteteag etaagtaaga
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cagggttage ageattteta gacettgatg gtaaaatgat gtteteaace tttgetttea
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                                25
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Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
                            40
       35
Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
                                            60
                        55
   50
Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
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                    70
Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
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                                    90
Thr His Ile Asp Thr Ser Thr Gln Leu
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ccggggtctg gcagctctgc gcccggctag gagcgggcgg gcgagcatta gcctgcgtcc
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tggagaaggg gcgcagcgcc gcagttgagg ccgaagcagc ccctcgcggg cgtaggatac
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Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
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Pro Arg Thr
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Ala Ala Lys Leu Leu Asn Leu Tyr Pro Arg Lys Gly Arg Ile Ile Pro
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Gly Ala Asp Ala Asp Val Val Trp Asp Pro Glu Ala Thr Lys Thr
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                        55
Ile Ser Ala Ser Thr Gln Val Gln Gly Gly Asp Phe Asn Leu Tyr Glu
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                                        75
                   70
Asn Met Arg Cys His Gly Val Pro Leu Val Thr Ile Ser Arg Gly Arg
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                                    90
               85
Val Val Tyr Glu Asn Gly Val Phe Met Cys Ala Glu Gly Thr Gly Lys
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                               105
Phe Cys Pro Leu Arg Ser Phe Pro Asp Thr Val Tyr Lys Lys Leu Val
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Gln Arg Glu Lys Thr Leu Lys Val Arg Gly Val Ala Arg Thr Pro Tyr
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1700

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Ser Asn Arg Gly Phe Gln Glu Asp Ser Glu Ile Arg Ala Ala Glu Lys
                            40
Lys Phe Gly Ser Asn Lys Ala Glu Met Val Val Pro Asp Phe Ser Glu
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                                           60
Leu Phe Lys Glu Arg Ala Thr Ala Pro Phe Phe Val Phe Gln Val Phe
                   70
Cys Val Gly Leu Trp Cys Leu Asp Glu Tyr Trp Tyr Tyr Ser Val Phe
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Thr Leu Ser Met Leu Val Ala Phe Glu Ala Ser Leu Val Gln Gln
                               105
           100
Met Arg Asn Met Ser Glu Ile Arg Lys Met Gly Asn Lys Pro His Met
                                               125
                           120
Ile Gln Val Tyr Arg Ser Arg Lys Trp Arg Pro Ile Ala Ser Asp Glu
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   130
Ile Val Pro Gly Asp Ile Val Ser Ile Gly Glu Ala Gly Phe Arg Ser
                                        155
                   150
Val Pro Val Gly Ala Pro Ala Ser Gly Pro Leu Ala Asn Pro Pro Ala
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                                                        175
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Ser Ala Leu Gln Ala Ala Pro His Arg Arg Thr Trp Cys His Val Thr
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Cys Phe Cys Cys Glu Ala Ala
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Phe Arg Leu Ala Val Gln Ala Phe Ile Val Val Val Ile Gly Gly Leu
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                                               45
Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp
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120
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His Leu Leu Pro Leu Cys Ala Asp Val Val Pro Gly Pro Ser Trp Glu
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Glu Ser Phe Trp Arg Leu Thr Val Phe Phe Val Ser Leu Ser Leu Leu
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Gly Val Ile Leu Ile Ala Phe Gln Gln Ala Gln Tyr Ile Leu Met Glu
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phe Met Lys Thr Arq Gln Arq Gln Asn Ala Ser Ser Ser Gln Gln
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Cys	Lys	Asn	Phe	Leu	Asp	Thr		GIY	Pro	ser	ASP	125	GIY	AIG	Gly
		115	_	_			120	D	~1 ~	C 0 ==	7 w.e.		Cln.	\ cn	81 a
Lys		Cys	Leu	Pro	Val		Thr	Pro	GIII	Ser	140	116	GIII	ASII	AIG
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	rys	Arg	ser	Pro		int	IÀT	GIY	піз	155	GIII	Lys	Lys	11.13	160
145	C	Val	Ma	т	150	Tvc	uic	Lve	Thr		Thr	Ala	Δla	Ala	
Cys	Ser	val	IYL	165	Ser	цуз	1113	Lyo	170	50-				175	
cor	Thr	Ser	Thr		Thr	Glu	Glu	Lvs		Thr	Ser	Pro	Leu		Ser
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Lys	Asn	Leu	Thr	Leu	Pro	Lys	Asn	Leu	Leu	Asn	Lys	Glu	Glu	Asn	Thr
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Leu	Lys	Asn	Thr	Ile	Val	Phe	Ser	Asn	Pro	Ser	Ser	Glu	Cys		Met
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Lys	Glu	Gly	Ile	Gln	Thr	Cys	Met		Pro	Lys	Glu	Thr		Ile	Lys
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Thr	Ser	Glu	Asn	Thr	Ala	Glu			Glu	Arg	GIu		cys	Pro	Leu
_		275	_		•		280		11: -	T 0	Dro	285	N c m	Car	Pro
rys		Ser	гÀз	гåа	Leu		GIU	ASII	nis	Leu	300	arg	ASII	JC1	
Cl n	290	Wie	Gln	Pro	a en	295 Leu	Pro	Glu	Tle	Ser		Lvs	Asn	Asn	Gly
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Asn Leu Thr Glu Gly 385 Asn	Tyr Asn Lys Ser Gln 370 Asn Lys	Gln Lys Arg 355 Glu Leu Lys	Gln Val 340 Glu Asp Gln Arg	Val 325 Asp Asp Pro Asn Gly 405	310 Pro Thr Met Tyr Leu 390 Val	Leu Val Lys Phe Arg 375 Asn	Lys Pro Ser 360 Lys Trp Pro	Asn Ser 345 Glu Lys Ser Val	Glu 330 Ser Lys Lys Lys Ser 410	315 Val Glu Gln Leu Ser 395 Arg	Arg Asp Lys Asp Gln 380 Arg	His Lys Ile 365 Glu Thr	Cys Ile 350 Pro Lys Cys Glu	Glu 335 His Phe Arg Arg Gln 415	320 Asn Lys Val Glu Lys 400 Ser
Asn Leu Thr Glu Gly 385 Asn	Tyr Asn Lys Ser Gln 370 Asn Lys	Gln Lys Arg 355 Glu Leu	Gln Val 340 Glu Asp Gln Arg Leu	Val 325 Asp Asp Pro Asn Gly 405	310 Pro Thr Met Tyr Leu 390 Val	Leu Val Lys Phe Arg 375 Asn	Lys Pro Ser 360 Lys Trp Pro	Asn Ser 345 Glu Lys Ser Val	Glu 330 Ser Lys Lys Lys Ser 410	315 Val Glu Gln Leu Ser 395 Arg	Arg Asp Lys Asp Gln 380 Arg	His Lys Ile 365 Glu Thr	Cys Ile 350 Pro Lys Cys Glu	Glu 335 His Phe Arg Arg Gln 415	320 Asn Lys Val Glu Lys 400 Ser
Asn Leu Thr Glu Gly 385 Asn	Tyr Asn Lys Ser Gln 370 Asn Lys Leu	Gln Lys Arg 355 Glu Leu Lys	Gln Val 340 Glu Asp Gln Arg Leu 420	Val 325 Asp Asp Pro Asn Gly 405 Val	310 Pro Thr Met Tyr Leu 390 Val	Leu Val Lys Phe Arg 375 Asn Ala Ser	Lys Pro Ser 360 Lys Trp Pro Asp	Asn Ser 345 Glu Lys Ser Val Phe 425	Glu 330 Ser Lys Lys Lys Ser 410 Glu	315 Val Glu Gln Leu Ser 395 Arg	Arg Asp Lys Asp Gln 380 Arg Pro	His Lys Ile 365 Glu Thr Pro	Cys Ile 350 Pro Lys Cys Glu Leu 430	Glu 335 His Phe Arg Arg Gln 415 Ser	320 Asn Lys Val Glu Lys 400 Ser Ser
Asn Leu Thr Glu Gly 385 Asn	Tyr Asn Lys Ser Gln 370 Asn Lys Leu	Gln Lys Arg 355 Glu Leu Lys	Gln Val 340 Glu Asp Gln Arg Leu 420	Val 325 Asp Asp Pro Asn Gly 405 Val	310 Pro Thr Met Tyr Leu 390 Val	Leu Val Lys Phe Arg 375 Asn Ala Ser Trp	Lys Pro Ser 360 Lys Trp Pro Asp	Asn Ser 345 Glu Lys Ser Val Phe 425 Ile	Glu 330 Ser Lys Lys Lys Ser 410 Glu	315 Val Glu Gln Leu Ser 395 Arg Arg	Arg Asp Lys Asp Gln 380 Arg Pro	His Lys Ile 365 Glu Thr Pro Glu Thr	Cys Ile 350 Pro Lys Cys Glu Leu 430 Arg	Glu 335 His Phe Arg Arg Gln 415 Ser	320 Asn Lys Val Glu Lys 400 Ser Ser
Asn Leu Thr Glu Gly 385 Asn Asp	Tyr Asn Lys Ser Gln 370 Asn Lys Leu Ile	Gln Lys Arg 355 Glu Leu Lys Lys Asn 435	Gln Val 340 Glu Asp Gln Arg Leu 420 Val	Val 325 Asp Pro Asn Gly 405 Val	310 Pro Thr Met Tyr Leu 390 Val Cys	Leu Val Lys Phe Arg 375 Asn Ala Ser Trp	Lys Pro Ser 360 Lys Trp Pro Asp Cys 440	Asn Ser 345 Glu Lys Ser Val Phe 425 Ile	Glu 330 Ser Lys Lys Lys Ser 410 Glu	315 Val Glu Gln Leu Ser 395 Arg Arg	Arg Asp Lys Asp Gln 380 Arg Pro Ser	His Lys Ile 365 Glu Thr Pro Glu Thr 445	Cys Ile 350 Pro Lys Cys Glu Leu 430 Arg	Glu 335 His Phe Arg Arg Gln 415 Ser	320 Asn Lys Val Glu Lys 400 Ser Ser
305 Asn Leu Thr Glu Gly 385 Asn Asp Asp	Tyr Asn Lys Ser Gln 370 Asn Lys Leu Ile Lys 450	Gln Lys Arg 355 Glu Leu Lys Lys Asn 435 Ala	Gln Val 340 Glu Asp Gln Arg Leu 420 Val	Val 325 Asp Pro Asn Gly 405 Val Arg	310 Pro Thr Met Tyr Leu 390 Val Cys Ser Glu	Leu Val Lys Phe Arg 375 Asn Ala Ser Trp Ile 455	Lys Pro Ser 360 Lys Trp Pro Asp Cys 440 Ala	Asn Ser 345 Glu Lys Ser Val Phe 425 Ile Ser	Glu 330 Ser Lys Lys Ser 410 Glu Gln Ser	315 Val Glu Gln Leu Ser 395 Arg Glu Leu	Arg Asp Lys Asp Gln 380 Arg Pro Ser Ser Pro 460	His Lys Ile 365 Glu Thr Pro Glu Thr 445 Ala	Cys Ile 350 Pro Lys Cys Glu Leu 430 Arg	Glu 335 His Phe Arg Gln 415 Ser Glu Gln	320 Asn Lys Val Glu Lys 400 Ser Ser Val
305 Asn Leu Thr Glu Gly 385 Asn Asp Asp	Tyr Asn Lys Ser Gln 370 Asn Lys Leu Ile Lys 450	Gln Lys Arg 355 Glu Leu Lys Lys Asn 435	Gln Val 340 Glu Asp Gln Arg Leu 420 Val	Val 325 Asp Pro Asn Gly 405 Val Arg	310 Pro Thr Met Tyr Leu 390 Val Cys Ser Glu	Leu Val Lys Phe Arg 375 Asn Ala Ser Trp Ile 455	Lys Pro Ser 360 Lys Trp Pro Asp Cys 440 Ala	Asn Ser 345 Glu Lys Ser Val Phe 425 Ile Ser	Glu 330 Ser Lys Lys Ser 410 Glu Gln Ser	315 Val Glu Gln Leu Ser 395 Arg Glu Leu	Arg Asp Lys Asp Gln 380 Arg Pro Ser Ser Pro 460	His Lys Ile 365 Glu Thr Pro Glu Thr 445 Ala	Cys Ile 350 Pro Lys Cys Glu Leu 430 Arg	Glu 335 His Phe Arg Gln 415 Ser Glu Gln	320 Asn Lys Val Glu Lys 400 Ser Ser Val Arg
305 Asn Leu Thr Glu Gly 385 Asn Asp Cys Glu 465	Tyr Asn Lys Ser Gln 370 Asn Lys Leu Ile Lys 450 Ala	Gln Lys 355 Glu Leu Lys Lys Asn 435 Ala	Gln Val 340 Glu Asp Gln Arg Leu 420 Val Asp	Val 325 Asp Pro Asn Gly 405 Val Arg Ala	310 Pro Thr Met Tyr Leu 390 Val Cys Ser Glu Gln 470	Leu Val Lys Phe Arg 375 Asn Ala Ser Trp Ile 455 Lys	Lys Pro Ser 360 Lys Trp Pro Asp Cys 440 Ala	Asn Ser 345 Glu Lys Ser Val Phe 425 11e Ser Glu	Glu 330 Ser Lys Lys Ser 410 Glu Gln Ser	315 Val Glu Gln Leu Ser 395 Arg Glu Leu Lys 475	Arg Asp Lys Asp Gln 380 Arg Pro Ser Ser Pro 460 Cys	His Lys Ile 365 Glu Thr Pro Glu Thr 445 Ala	Cys Ile 350 Pro Lys Cys Glu Leu 430 Arg Ala Asp	Glu 335 His Phe Arg Arg Gln 415 Ser Glu Gln Lys	320 Asn Lys Val Glu Lys 400 Ser Ser Val Arg
305 Asn Leu Thr Glu Gly 385 Asn Asp Cys Glu 465	Tyr Asn Lys Ser Gln 370 Asn Lys Leu Ile Lys 450 Ala	Gln Lys Arg 355 Glu Leu Lys Lys Asn 435 Ala	Gln Val 340 Glu Asp Gln Arg Leu 420 Val Asp	Val 325 Asp Pro Asn Gly 405 Val Arg Ala	310 Pro Thr Met Tyr Leu 390 Val Cys Ser Glu Gln 470	Leu Val Lys Phe Arg 375 Asn Ala Ser Trp Ile 455 Lys	Lys Pro Ser 360 Lys Trp Pro Asp Cys 440 Ala	Asn Ser 345 Glu Lys Ser Val Phe 425 11e Ser Glu	Glu 330 Ser Lys Lys Ser 410 Glu Gln Ser Lys	315 Val Glu Gln Leu Ser 395 Arg Glu Leu Lys 475	Arg Asp Lys Asp Gln 380 Arg Pro Ser Ser Pro 460 Cys	His Lys Ile 365 Glu Thr Pro Glu Thr 445 Ala	Cys Ile 350 Pro Lys Cys Glu Leu 430 Arg Ala Asp	Glu 335 His Phe Arg Gln 415 Ser Glu Gln Lys	320 Asn Lys Val Glu Lys 400 Ser Ser Val Arg
305 Asn Leu Thr Glu Gly 385 Asn Asp Cys Glu 465 Cys	Tyr Asn Lys Ser Gln 370 Asn Lys Leu Ile Lys 450 Ala Ser	Gln Lys Arg 355 Glu Leu Lys Lys Asn 435 Ala Gly Asp	Gln Val 340 Glu Asp Gln Arg Leu 420 Val Asp Tyr Ser	Val 325 Asp Pro Asn Gly 405 Val Arg Ala Tyr	310 Pro Thr Met Tyr Leu 390 Val Cys Ser Glu Gln 470 Ser	Leu Val Lys Phe Arg 375 Asn Ala Ser Trp Ile 455 Lys Asp	Lys Pro Ser 360 Lys Trp Pro Asp Cys 440 Ala Pro Cys	Asn Ser 345 Glu Lys Ser Val Phe 425 Ile Ser Glu	Glu 330 Ser Lys Lys Lys Ser 410 Glu Ser Lys	315 Val Glu Gln Leu Ser 395 Arg Glu Leu Lys 475 Ser	Arg Asp Lys Asp Gln 380 Arg Pro Ser Ser Cys Ser	His Lys Ile 365 Glu Thr Pro Glu Thr 445 Ala Val	Cys Ile 350 Pro Lys Cys Glu Leu 430 Arg Ala Asp	Glu 335 His Phe Arg Gln 415 Ser Glu Gln Lys Val 495	Asn Lys Val Glu Lys 400 Ser Val Arg Phe 480 Arg
305 Asn Leu Thr Glu Gly 385 Asn Asp Cys Glu 465 Cys	Tyr Asn Lys Ser Gln 370 Asn Lys Leu Ile Lys 450 Ala Ser	Gln Lys Arg 355 Glu Leu Lys Lys Asn 435 Ala Gly Asp	Gln Val 340 Glu Asp Gln Arg Leu 420 Val Asp Tyr Ser Gly	Val 325 Asp Pro Asn Gly 405 Val Arg Ala Tyr	310 Pro Thr Met Tyr Leu 390 Val Cys Ser Glu Gln 470 Ser	Leu Val Lys Phe Arg 375 Asn Ala Ser Trp Ile 455 Lys Asp	Lys Pro Ser 360 Lys Trp Pro Asp Cys 440 Ala Pro Cys	Asn Ser 345 Glu Lys Ser Val Phe 425 Ile Ser Glu Gly Trp	Glu 330 Ser Lys Lys Lys Ser 410 Glu Ser Lys	315 Val Glu Gln Leu Ser 395 Arg Glu Leu Lys 475 Ser	Arg Asp Lys Asp Gln 380 Arg Pro Ser Ser Cys Ser	His Lys Ile 365 Glu Thr Pro Glu Thr 445 Ala Val	Cys Ile 350 Pro Lys Cys Glu Leu 430 Arg Ala Asp Ser Ser	Glu 335 His Phe Arg Gln 415 Ser Glu Gln Lys Val 495	320 Asn Lys Val Glu Lys 400 Ser Ser Val Arg
305 Asn Leu Thr Glu Gly 385 Asn Asp Cys Glu 465 Cys	Tyr Asn Lys Ser Gln 370 Asn Lys Leu Ile Lys 450 Ala Ser	Gln Lys Arg 355 Glu Leu Lys Lys Asn 435 Ala Gly Asp	Gln Val 340 Glu Asp Gln Arg Leu 420 Val Asp Tyr Ser Gly 500	Val 325 Asp Pro Asn Gly 405 Val Arg Ala Tyr Ser 485 Ser	310 Pro Thr Met Tyr Leu 390 Val Cys Ser Glu Gln 470 Ser Trp	Leu Val Lys Phe Arg 375 Asn Ala Ser Trp Ile 455 Lys Asp Gly	Lys Pro Ser 360 Lys Trp Pro Asp Cys 440 Ala Pro Cys Ser	Asn Ser 345 Glu Lys Ser Val Phe 425 Ile Ser Glu Gly Trp 505	Glu 330 Ser Lys Lys Ser 410 Glu Gln Ser Lys Ser 490 Ser	315 Val Glu Gln Leu Ser 395 Arg Glu Leu Lys 475 Ser	Arg Asp Lys Asp Gln 380 Arg Pro Ser Ser Cys Ser	His Lys Ile 365 Glu Thr Pro Glu Thr 445 Ala Val Gly Ser	Cys Ile 350 Pro Lys Cys Glu Leu 430 Arg Ala Asp Ser 510	Glu 335 His Phe Arg Gln 415 Ser Glu Gln Lys Val 495 Ser	Asn Lys Val Glu Lys 400 Ser Val Arg Phe 480 Arg

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520
       515
Asp Ser Val Ser Gln Asn Asp Phe Pro Ser Glu Ala Pro Ile Ser Leu
            535
                             540
Asn Leu Ser His Asn Ile Cys Asn Pro Met Thr Val Asn Ser Leu Pro
                                  555
           550
Gln Tyr Ala Glu Pro Ser Cys Pro Ser Leu Pro Ala Gly Pro Thr Gly
                                570
Val Glu Glu Asp Lys Gly Leu Tyr Ser Pro Gly Asp Leu Trp Pro Thr
                            585
          580
Pro Pro Val Cys Val Thr Ser Ser Leu Asn Cys Thr Leu Glu Asn Gly
                                           605
                         600
      595
Val Pro Cys Val Ile Gln Glu Ser Ala Pro Val His Asn Ser Phe Ile
                                      620
                    615
Asp Trp Ser Ala Thr Cys Glu Gly Gln Phe Ser Ser Ala Tyr Cys Pro
                           635
               630
Leu Glu Leu Asn Asp Tyr Asn Ala Phe Pro Glu Glu Asn Met Asn Tyr
                       650
             645
Ala Asn Gly Phe Pro Cys Pro Ala Asp Val Gln Thr Asp Phe Ile Asp
                            665
                                               670
          660
His Asn Ser Gln Ser Thr Trp Asn Thr Pro Pro Asn Met Pro Ala Ala
                                          685
               680
       675
Trp Gly His Ala Ser Phe Ile Ser Ser Pro Pro Tyr Leu Thr Ser Thr
                                       700
                    695
Arg Ser Leu Ser Pro Met Ser Gly Leu Phe Gly Ser Ile Trp Ala Pro
                                    715
               710
Gln Ser Asp Val Tyr Glu Asn Cys Cys Pro Ile Asn Pro Thr Thr Glu
                                730
His Ser Thr His Met Glu Asn Gln Ala Val Val Cys Lys Glu Tyr Tyr
                            745
         740
Pro Gly Phe Asn Pro Phe Arg Ala Tyr Met Asn Leu Asp Ile Trp Thr
                                 765
                 760
Thr Thr Ala Asn Arg Asn Ala Asn Phe Pro Leu Ser Arg Asp Ser Ser
                                        780
Tyr Cys Gly Asn Val
785
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<211> 501
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<213> Homo sapiens
<400> 2333
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gaagtaataa atatgaatgg ggtgtatcat ataatgaaca acgaatatcc atatagtgca
gacgaagttc ttcacaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta
180
aaaagctatc atattgctta tgaagcacat aaaggtcagt tccgaaaaaaa cggattacca
tacattatgc atcctataca agttgcaggt attttaacag aaatgcgatt agacggaccg
acgattgtcg caggtttttt gcatgatgta attgaagata caccgtatac atttgaagat
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gtaaaagaaa tgttcaatga agaagttgct cgaattgttg atggtgtgac gaagcttaaa
420
aaaataaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttatttatt
gcgattgcca aagatgtacg c
501
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<211> 143
<212> PRT
<213> Homo sapiens
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Met Asn Gly Val Tyr His Ile Met Asn Asn Glu Tyr Pro Tyr Ser Ala
                                    10
Asp Glu Val Leu His Lys Ala Lys Ser Tyr Leu Ser Ala Asp Glu Tyr
                                                     30
                                25
            20
Glu Tyr Val Leu Lys Ser Tyr His Ile Ala Tyr Glu Ala His Lys Gly
       35
                            40
Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val
                                            60
                        55
    50
Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala
                    70
                                        75
Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp
                                    90
                85
Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val
                                105
Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala
                                                125
                            120
       115
Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg
                        135
<210> 2335
<211> 387
<212> DNA
<213> Homo sapiens
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tctctgcaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac
cccatgggcc gtgtggaatt taatcaggca agagttcaga cccatttcat ccacacactc
acccgcctgc agttggaaca ggaggctgag agctttaggg agctggaggc ccctgcccag
ggcagcccac ccagccctgg tgaggaggcc ctggtcccta ctttcccact ggccaagccc
300
cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttccaca
gcatcttcat cagcatcggg cactagt
387
<210> 2336
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<211> 106
<212> PRT
<213> Homo sapiens
<400> 2336
Met Asp His Thr Ala Phe Pro Cys Gly Cys Cys Arg Glu Gly Cys Glu
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1
Asn Pro Met Gly Arg Val Glu Phe Asn Gln Ala Arg Val Gln Thr His
            20
                                25
Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Glu Ala Glu Ser
       35
Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly
                        55
Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn
                                       75
                   70
Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser
                                    90
               85
Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser
            100
                                105
<210> 2337
<211> 359
<212> DNA
<213> Homo sapiens
<400> 2337
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accatgtgca gctcaagaat ggcctccggc ccatcggcct cggggcaggg gaagggcagc
ttototgcac cagetteeet getgggetee agggeeeaca ggetgaggee gggggeeeag
gggtcaatgc caggcaccct gctattgagg aacctatcca ggaggaagga ctcgggcaga
240
cctgcgggat cctcgtcctc ccacgggtcc tcatggcaga agcagaagga gctggagtcg
300
ctgaggtccg tgggcaggcg ggctgggccc aacgtggggt caccgacctc ctcaaagct
359
<210> 2338
<211> 98
<212> PRT
<213> Homo sapiens
<400> 2338
Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly
                                    10
                5
Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His
            20
                                25
Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu
                            40
                                                45
        35
Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser
                                            60
                        55
Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lỳs Glu Leu Glu Ser Leu
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75
65
Arg Ser Val Gly Arg Arg Ala Gly Pro Asm Val Gly Ser Pro Thr Ser
                                    90
                85
Ser Lys
<210> 2339
<211> 439
<212> DNA
<213> Homo sapiens
<400> 2339
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ccctgtcctc caccttcgtc gtcgcagtcg tcagtgtcct gtggtttgtg ccctccgggc
actggtcccg gtagggcttg taatgctggg gcgctcggcg cgatgtgcca gttccttggt
gagttactcc tctacactgg tgtgaacaag accggagaat tcccccccat attctcgttt
240
cocgetegte eegeacgtea ttgggactgg ettttacgeg gtagtggttg eegtactetg
gttgctctgc ggcacggtcg gcagggggat catgtcatga gtccgacggt gagcgagcgg
egtettageg egecaatgeg aegtggeate gtggeactgt gegtggegat ggeettegtg
ttgtcggggt gcggtgctg
439
<210> 2340
<211> 92
<212> PRT
<213> Homo sapiens
<400> 2340
Met Cys Gln Phe Leu Gly Glu Leu Leu Leu Tyr Thr Gly Val Asn Lys
                 5
                                     10
 1
Thr Gly Glu Phe Pro Pro Ile Phe Ser Phe Pro Ala Arg Pro Ala Arg
            20
His Trp Asp Trp Leu Leu Arg Gly Ser Gly Cys Arg Thr Leu Val Ala
                            40
Leu Arg His Gly Arg Gln Gly Asp His Val Met Ser Pro Thr Val Ser
                                            60
                        55
Glu Arg Arg Leu Ser Ala Pro Met Arg Arg Gly Ile Val Ala Leu Cys
                    70
                                         75
 Val Ala Met Ala Phe Val Leu Ser Gly Cys Gly Ala
                                     90
                85
 <210> 2341
 <211> 411
 <212> DNA
 <213> Homo sapiens
 <400> 2341
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gccaaacete ceetecatee tgcccaagat ggatettget gageeteeet ggcatatgee
60
tctgcaggag gagccagagg aggtcacgga ggaggaggag gaaagggaag aagaggagag
120
ggagaaggaa gcagaggagg aggaggaaga ggaagagctg ctcctgtgag cgggtcccca
180
ggagccaccg cacaggccca tgccccttca cctagcacca gcagcagcac cagcagccag
240
agtoctgggg ccacccggca caggcaggag gattctggag accaggccac atcaggcnat
ggaagtggag agcagtgtga aacccacctt gtcagtgccc tcagtcaccc caagtacagt
ggccccgggg gttcagaact atagccagga gtctgggggc actgagtggc n
<210> 2342
<211> 113
<212> PRT
<213> Homo sapiens
<400> 2342
Ala Ser Leu Ala Tyr Ala Ser Ala Gly Gly Ala Arg Gly Gly His Gly
                                    10
1
Gly Gly Gly Lys Gly Arg Arg Gly Glu Gly Glu Gly Ser Arg Gly
            20
                                25
Gly Gly Gly Arg Gly Arg Ala Ala Pro Val Ser Gly Ser Pro Gly Ala
Thr Ala Gln Ala His Ala Pro Ser Pro Ser Thr Ser Ser Ser Thr Ser
                        55
Ser Gln Ser Pro Gly Ala Thr Arg His Arg Gln Glu Asp Ser Gly Asp
                                        75
                    70
Gln Ala Thr Ser Gly Xaa Gly Ser Gly Glu Gln Cys Glu Thr His Leu
                85
Val Ser Ala Leu Ser His Pro Lys Tyr Ser Gly Pro Gly Gly Ser Glu
                                105
Leu
<210> 2343
<211> 522
<212> DNA
<213> Homo sapiens
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ggaggccagg gaccctacca agccatgtcc caggacatgg gcaataccca agacatgttc
120
agccctgatc agageteaat geccatgage aacgtgggea ccaccegget cagecacatg
180
cototgocco otgogtocaa tootootggg acogtgoatt cagooccaaa cogggggota
ggcaggcggc cttcggacct caccatcagt attaatcaga tgggctcacc gggcatgggg
300
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cacttgaagt cgcccaccct tagccaggtg cactcacccc tggtcacctc gccctctgcc
aacctcaagt caccccagac tooctcacag atggtgccct tgccttctgc caacccgcca
420
ggacetetea agtegeecca ggteetegge teeteectea gtgteegtte acceaetgge
tegeceagea ggeteaagte teetteeatg geggtgeett et
522
<210> 2344
<211> 174
<212> PRT
<213> Homo sapiens
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Gly Pro Gln Lys Met Leu Met Pro Ser Gln Phe Pro Asn Gln Gly Gln
                                    10
                5
Gln Gly Phe Ser Gly Gly Gln Gly Pro Tyr Gln Ala Met Ser Gln Asp
                                                    30
            20
                                25
Met Gly Asn Thr Gln Asp Met Phe Ser Pro Asp Gln Ser Ser Met Pro
                                                45
                            40
        35
Met Ser Asn Val Gly Thr Thr Arg Leu Ser His Met Pro Leu Pro Pro
                        55
                                            60
Ala Ser Asn Pro Pro Gly Thr Val His Ser Ala Pro Asn Arg Gly Leu
                    70
Gly Arg Arg Pro Ser Asp Leu Thr Ile Ser Ile Asn Gln Met Gly Ser
                                   90
                85
Pro Gly Met Gly His Leu Lys Ser Pro Thr Leu Ser Gln Val His Ser
                                                   110
                               105
           100
Pro Leu Val Thr Ser Pro Ser Ala Asn Leu Lys Ser Pro Gln Thr Pro
                           120
                                               125
        115
Ser Gln Met Val Pro Leu Pro Ser Ala Asn Pro Pro Gly Pro Leu Lys
                       135
                                            140
Ser Pro Gln Val Leu Gly Ser Ser Leu Ser Val Arg Ser Pro Thr Gly
                                       155
                  150
145
Ser Pro Ser Arg Leu Lys Ser Pro Ser Met Ala Val Pro Ser
                                    170
<210> 2345
<211> 561
<212> DNA
<213> Homo sapiens
<400> 2345
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ggcctccacc agcccgcgtc caggccgcct gggctcgacg cgctggacag gcgccggcgg
120
ctggcgctgc cgcccttttg ccgtttccgc cttttcttgc gcttctggtg cttgctggag
180
geotgegege eegectegee tgegetgtee gagteettgg egetgtegga egtgagtgae
togoagttot geageogeag gtoogactog etetecacca tagetattaa tgecaagaat
300
```

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gcaaatgaaa agaatatcat ctgggtgaat taccttctta gcaatcctga gtacaaggac
360
acacccatgg acatcgcaca getececcat etgeeggaga aaaetteega ateeteggag
420
acatecgaet etgagteaga etetaaagae aceteaggta ttacagagga caaegagaae
tccaagnntc cgacgagaag gggaaccagt ccgagaacag cgaagacccg gagcccgacc
ggaagaagtc gggcaacgcg t
561
<210> 2346
<211> 187
<212> PRT
<213> Homo sapiens
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1
                                    10
Ser Ser Arg Gly Gly Leu His Gln Pro Ala Ser Arg Pro Pro Gly Leu
                                25
           20
Asp Ala Leu Asp Arg Arg Arg Leu Ala Leu Pro Pro Phe Cys Arg
                            40
                                                45
Phe Arg Leu Phe Leu Arg Phe Trp Cys Leu Leu Glu Ala Cys Ala Pro
                        55
   50
Ala Ser Pro Ala Leu Ser Glu Ser Leu Ala Leu Ser Asp Val Ser Asp
                                        75
Ser Gln Phe Cys Ser Arg Arg Ser Asp Ser Leu Ser Thr Ile Ala Ile
                                   90
               85
Asn Ala Lys Asn Ala Asn Glu Lys Asn Ile Ile Trp Val Asn Tyr Leu
                               105
           100
Leu Ser Asn Pro Glu Tyr Lys Asp Thr Pro Met Asp Ile Ala Gln Leu
                            120
                                                125
Pro His Leu Pro Glu Lys Thr Ser Glu Ser Ser Glu Thr Ser Asp Ser
                                            140
   130
                       135
Glu Ser Asp Ser Lys Asp Thr Ser Gly Ile Thr Glu Asp Asn Glu Asn
                    150
                                       155
Ser Lys Xaa Pro Thr Arg Arg Gly Thr Ser Pro Arg Thr Ala Lys Thr
                                    170
               165
Arg Ser Pro Thr Gly Arg Ser Arg Ala Thr Arg
           180
                                185
<210> 2347
<211> 375
<212> DNA
<213> Homo sapiens
<400> 2347
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gagaacgtcg agtacgcctg cgccgcgccg gaagtactga agggtgaata cagccgtaac
gtcggtccga acatcgacgc ctggtccgat ttccagccgc tgggcgtggt ggcggggatc
180
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acgccattca acttcccggc gatggtgccc ctgtggatgt atccgttggc gatcgtttgc
ggtaactgct ttatcctcaa gccgtccgag cgtgatccga gctcgacctt gctgatcgcc
300
cagctgttgc aggaagccgg tttgcccaaa ggtgtgctga acgtggtgca tggtgacaag
360
accgcggtgg acgcg
375
<210> 2348
<211> 125
<212> PRT
<213> Homo sapiens
<400> 2348
Ile Ser Glu Glu His Gly Arg Thr Leu Glu Asp Ala Ala Gly Glu Leu
                                                        15
                 5
1
Lys Arg Gly Ile Glu Asn Val Glu Tyr Ala Cys Ala Ala Pro Glu Val
            20
                                25
Leu Lys Gly Glu Tyr Ser Arg Asn Val Gly Pro Asn Ile Asp Ala Trp
                                                 45
                            40
        35
Ser Asp Phe Gln Pro Leu Gly Val Val Ala Gly Ile Thr Pro Phe Asn
                        55
Phe Pro Ala Met Val Pro Leu Trp Met Tyr Pro Leu Ala Ile Val Cys
                                        75
Gly Asn Cys Phe Ile Leu Lys Pro Ser Glu Arg Asp Pro Ser Ser Thr
                                    90
                85
Leu Leu Ile Ala Gln Leu Leu Gln Glu Ala Gly Leu Pro Lys Gly Val
                                105
            100
Leu Asn Val Val His Gly Asp Lys Thr Ala Val Asp Ala
                                                 125
                            120
        115
<210> 2349
<211> 417
<212> DNA
<213> Homo sapiens
<400> 2349
nnnaaaaaaa aaaaaaaaa aaaaacacaa tatttaatgg acgcggttta ttcagcaggt
gctgacaaag tttttggtgt cccaggagat tttaatctag cctttttaga tgatattatt
120
gcacataatc atattaaatg gattggtaat acaaatgaac ttaatgcaag ttatgccgct
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Leu Ala Phe Leu Asp Asp Ile Ile Ala His Asn His Ile Lys Trp Ile
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Gly Asn Thr Asn Glu Leu Asn Ala Ser Tyr Ala Ala Asp Gly Tyr Ala
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Arg Ile Asn Gly Ile Gly Ala Met Val Thr Thr Phe Gly Val Gly Glu
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Leu Ser Ala Val Asn Gly Ile Ala Gly Ser Tyr Ala Glu Arg Val Pro
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Val Ile Ala Ile Thr Gly Ala Pro Thr Arg Ala Val Glu Gln Glu Gly
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Lys Tyr Val His His Ser Leu Gly Glu Gly Thr Phe Asp Asp Tyr Arg
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Asn Asp Ala Gly Met Ile Arg Ile Asp Asp Asn Leu Gly Ile Ala Leu
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                                                  110
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Asp Pro Asp Val Met Trp Gln Phe Asp Glu Thr Ile Leu Gly Leu Val
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Asp Gly Cys Arg Glu Leu Gly Val Pro Val Thr Gly Gly Asn Val Ser
                                       140
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Leu His Asn Arg Thr Gly Asp Glu Ser Ile Arg Pro Thr Pro Leu Val
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                                     155
Gly Val Leu Gly Val Ile Asp Asp Val His Arg Arg Ile Pro Ser Ala
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Phe Ala His Asp Gly Asp Ala Val Leu Leu Gly Thr Thr Lys Cys
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Val Asn Asn Ala Gly Ile Thr Gln Asp Thr Leu Met Leu Lys Met Thr
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3660		gccggctgtg			
gcctgcagtg 3720		tgtggggcag			
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60
                       55
Ile Asp Phe Asp Gly Asp Arg Thr Tyr Thr Val Thr Leu Arg Lys Thr
                                        75
                   70
Arg Phe Ala Asp Gly Thr Glu Val Lys Ala His Asn Phe Val Lys Ala
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<213> Homo sapiens
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            20
Gly Leu Val Ile Glu Phe Gln Gln Thr Asn His Glu Gly Gln Met Ile
                            40
Glu Trp Ile His His Ala Arg Arg Ile Ala Gly Ile Val Ile Asn
                                           60
                        55
Pro Gly Ala Trp Thr His Thr Ser Ala Ala Ile His Asp Ala Leu Ile
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                   70
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Arg Glu Asp Phe Arg His Phe Ser Tyr Val Ser Arg
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Arg Trp Trp Gly Trp Gly Leu Gln Gln Leu Gly Pro Leu Ile Ser Leu
                            40
Lys Ala Gln Gln His Thr Val Ser Gln Val Cys Gln Val Pro Gln His
                                            60
                        55
Gly His Pro Ala Leu Thr Ala Pro Pro Arg Leu Pro Ala Cys His His
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360
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ggcccctgct gtggtgctag gtccccagat gagagatcac ggtcatgaag atcagccccc
420
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ctggcctgct cacagagccc tacctcagcc tgtggtaagc gcacctgctc ggccctggtg
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           20
Ser Leu Pro Pro Ser Ser Glu Val Ser Phe Pro Thr Phe Ser Glu Leu
                            40
       35
Ser Val Ser Met Ala Ser Ser Ala Thr Ser Ala Thr Ser Pro Asp Val
                        55
                                            60
    50
Leu Ala Ser Val Ser Ile Ala Ser Ser Trp Arg Ser Ser Ala Arg Cys
                                        75
                    70
65
Ser Lys Pro Thr Ala Xaa Arg Ser Lys Arg Asp Cys Val Thr Thr Gln
                85
                                    90
Lys Val Ala Gln Gly Leu Ala Ala Val Pro Ser Gly Ser Leu Cys Ala
                                                     110
           100
                                105
Gln Pro Pro Ser Ala Gly Phe Pro Gly Pro Cys Cys Gly Ala Arg Ser
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                            120
Pro Asp Glu Arg Ser Arg Ser
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<212> DNA
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ggtgcttgcc ctggcatgaa cgccccaggg gaggtcgacg ccgtcgggat tctcacaccg
180
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Thr Ala Glu Asp Met Arg Trp Leu Asp Gly Leu Cys Arg Gly Arg Gly
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Ile Glu Leu Gly Ala Asn Gln Asn Cys Leu Gly His Met Glu Pro Trp
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Leu Glu Thr Glu Ser His His His Arg Cys Glu Asn Pro Asp Gly Val
Asp Leu Pro Trp Gly Val His Ala Arg Ala Ser Thr Leu Ala Pro Val
Pro Glu Asn Leu Asp Phe Val Gln Arg Leu Leu Gly Glu Leu Thr Glu
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360
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                                25
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Ser Trp Gly Val Asp Phe Val Lys Tyr Asp Arg Cys Ser Gly Asp Ser
                           40
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Ala His Asp Asp Gln Val Ala Ser Phe Thr Ala Met Arg Asp Ala Ile
   50
                                            60
Arg Ser Thr Gly Arg Pro Met Val Tyr Ser Ile Asn Pro Asn Ser Glu
                                        75
                   70
Ser Pro Asp Arg Ser Gly Ala Gln Phe Asp Trp Gly Gly Val Ala Thr
                                    90
Met Thr Arg Thr Thr Asn Asp Ile Ser Pro Val Trp Thr Thr Arg Pro
                                105
            100
Ala Gly Ala Asp Ala Thr Pro Ala Ser Gly Tyr Gln Gly Ile Arg Asp
                                                125
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Ile Ile Asp Ala Val Ala Pro Ile Gly Ala Arg Val Ala Thr Ala Ala
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   130
Ser Ser Thr Trp Thr Cys Ser Ser Ser Val Ser Ala Thr Arg
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<212> DNA
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Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg
       . 35
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Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys
                                          60
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Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala
                                       75
                   70
Ser Thr Ser Ala Pro Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser
                                   90
               85
Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg
                                                   110
                               105
           100
Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro
                          120
                                               125
       115
Pro Ala Pro Pro Leu Pro Pro
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<211> 327
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327
<210> 2372
<211> 104
<212> PRT
<213> Homo sapiens
<400> 2372
Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Glu
                                   10
1
Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile
                                25
            20
Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys
```

```
40
        35
Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
    50
                        55
                                            60
Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
                                        75
                    70
Ala Pro Arg Ser Cys Leu Phé Ser Gly Val Ser Gln Val Leu Ala Ser
                                    90
                85
Gly Gly Pro Arg Phe Ser Cys Ser
            100
<210> 2373
<211> 591
<212> DNA
<213> Homo sapiens
<400> 2373
gaattctgac attcaggaag tcaattgcag aaggtttaac caagttgatt ctgttttacc
aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagttct
120
cacttcaaag acatcagctg ttgagatgac ccaggcagta ttgaatactc agctttcatc
agaaaatgtt accaaagttg agcaaaattc accagcagtt tgtgaaacaa tttctgttcc
caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct
cgctttgctt tcacaggcac gtaagactca gaagacagta ttaaaagatg ctaatcaaac
tattcaggat totaaaccag acagttgtga aatgaatcca aatacccaaa tgactggtaa
ccaactgaat ttgaagaaca tggaaactcc aagtacttct aatgtaagtg gcagggtttt
ggacaactcc ttttgcagtg gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga
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cagtagctgt tccatggaag tgctagcaac ctgtctttcc ctgtggaaaa a
591
<210> 2374
<211> 167
<212> PRT
<213> Homo sapiens
<400> 2374
Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
                                    10
Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
                                25
            20
Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
                                                45
        35
Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
                                            60
                        55
    50
Asn Glu Asn Met Leu Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
                    70
                                        75
Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys
```

```
90
                85
Pro Asp Ser Cys Glu Met Asn Pro Asn Thr Gln Met Thr Gly Asn Gln
           100
                                105
                                                    110
Leu Asn Leu Lys Asn Met Glu Thr Pro Ser Thr Ser Asn Val Ser Gly
                                                125
                            120
       115
Arg Val Leu Asp Asn Ser Phe Cys Ser Gly Gln Glu Ser Ser Thr Lys
                                            140
                        135
   130
Gly Met Pro Ala Lys Ser Asp Ser Ser Cys Ser Met Glu Val Leu Ala
                                        155
                   150
Thr Cys Leu Ser Leu Trp Lys
                165
<210> 2375
<211> 535
<212> DNA
<213> Homo sapiens
<400> 2375
ntggccatgt cgttgctcag cagcggcacc ctggacagtt accttgagcg tcacaaacaa
ctggacgcga tgcgcatgct gcacttcttc gccctcgacg aagaaaaccc cgccagcatc
120
tataactgcc tgcgcgccgc gcggggcaat gcccacgcgg tacgcgggcg gatcaccgcc
gacatgtggg aaaacctcaa cgccacctgg ctggaaatgc gcagcatcgc cgccgggggc
ctggcccggc atggcatcag ccacttctgt gactgggtca agcagcgttc gcacctgttc
cgcggggcaa cctcgggcac catcatgcgc aacgacgctt accggtttat tcgcctgggc
acgtttgtcg agcgcgcgga caacaccctg cgcctgctgg atgcgcgcta cgaaatgttt
ggtgaggagt cggaagaggt cagcgacctg tcggcacgcg ggtattacca gtggagcgcc
480
ctgctgcggg ccttgtcgtc attcgaggcg tataccgaac tgtaccccaa cgcgt
535
<210> 2376
<211> 178
<212> PRT
<213> Homo sapiens
<400> 2376
Xaa Ala Met Ser Leu Leu Ser Ser Gly Thr Leu Asp Ser Tyr Leu Glu
                                    10
Arg His Lys Gln Leu Asp Ala Met Arg Met Leu His Phe Phe Ala Leu
                                                    30
                                25
            20
Asp Glu Glu Asn Pro Ala Ser Ile Tyr Asn Cys Leu Arg Ala Ala Arg
                            40
                                                45
        35
Gly Asn Ala His Ala Val Arg Gly Arg Ile Thr Ala Asp Met Trp Glu
                        55
                                            60
    50
Asn Leu Asn Ala Thr Trp Leu Glu Met Arg Ser Ile Ala Ala Gly Gly
                    70
Leu Ala Arg His Gly Ile Ser His Phe Cys Asp Trp Val Lys Gln Arg
```

```
90
                85
Ser His Leu Phe Arg Gly Ala Thr Ser Gly Thr Ile Met Arg Asn Asp
                                105
           100
Ala Tyr Arg Phe Ile Arg Leu Gly Thr Phe Val Glu Arg Ala Asp Asn
                                                125
       115
                            120
Thr Leu Arg Leu Leu Asp Ala Arg Tyr Glu Met Phe Gly Glu Glu Ser
                       135
                                            140
Glu Glu Val Ser Asp Leu Ser Ala Arg Gly Tyr Tyr Gln Trp Ser Ala
                                        155
                   150
Leu Leu Arg Ala Leu Ser Ser Phe Glu Ala Tyr Thr Glu Leu Tyr Pro
                                    170
                                                        175
               165
Asn Ala
<210> 2377
<211> 622
<212> DNA
<213> Homo sapiens
<400> 2377
acgcgtgaag ggttgaggct tcagaagtgg tagggaagaa cagaagctcc cttctgaggg
agcacccagg agatgaaagg aaccaatcct gggtggtcct gcaccaggct tatcaacccc
tgacagacaa atggaaaact tctgtgatgg tgggacatga aaaaatattt caccettctg
ataaaatgga accagcagat agaagtagga atttttctgt taggtgaaat gtttttaaaa
atatgtatac aggaaaaagc ataaaacagt attgactggc aaacatagaa ctggaatgta
aatataatgt totttgccct gaatgattta agtggcatga taaaactcat gccacagact
360
gggtaagaca aggaatctaa tccactctaa aaagaagaaa agcatagtaa aattctcctt
agagttagaa ttattaatag ttcctatcta ctatttaatt taatcatagt taatgatgag
aatttettaa atttaaaget tetgatgatg etaaatgtge attteteatg atteettaaa
acaatttttg taaattctat teetaggace ttetgettte agaaaaatta atgtettgta
ttcttcgtat tggaggagat ct
622
<210> 2378
<211> 109
<212> PRT
<213> Homo sapiens
<400> 2378
Met Ser Phe Ile Met Pro Leu Lys Ser Phe Arg Ala Lys Asn Ile Ile
                                    10
1
Phe Thr Phe Gln Phe Tyr Val Cys Gln Ser Ile Leu Phe Tyr Ala Phe
                                25
            20
Ser Cys Ile His Ile Phe Lys Asn Ile Ser Pro Asn Arg Lys Ile Pro
```

```
40
Thr Ser Ile Cys Trp Phe His Phe Ile Arg Arg Val Lys Tyr Phe Phe
                       55
Met Ser His His His Arg Ser Phe Pro Phe Val Cys Gln Gly Leu Ile
                                       75
                   70
Ser Leu Val Gln Asp His Pro Gly Leu Val Pro Phe Ile Ser Trp Val
              85
                                  90
Leu Pro Gln Lys Gly Ala Ser Val Leu Pro Tyr His Phe
                               105
<210> 2379
<211> 342
<212> DNA
<213> Homo sapiens
<400> 2379
teatgacetg gagaettegg aaacteaaca agaetgeagg geaceaggg geaceageee
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
ggaaacataa cattcacgct tgtgaaccga gacgccatac cccagcggtg ccgagagcaa
cagtgctgtg caggtctggg cagatgaggg cctccaggac acgaggactc actcgctcac
240
cctgcccact gggcagctgc tcgccactcc cctcctggag ggcaggacgg acaccacaca
cacacacaag cagggaagct gtgcagcagt ggggagaaag ca
342
<210> 2380
<211> 113
<212> PRT
<213> Homo sapiens
<400> 2380
Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Ala Gly His Pro Gly
                                   10
1
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
           20
                               25
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
      35
                           40
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
                                           60
                       55
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
                   70
                                       75
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
                                  90
               85
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
                                                   110
           100
Ser
<210> 2381
<211> 434
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1732

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<212> DNA
<213> Homo sapiens
<400> 2381
gtgcaccetg gccatatgga cgccagegae gtcggegtet tgcgtgaegt ggaaccgate
ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg
cogtoctott tgacatggac ggaaccotgc tcaacaccot gccggcctgg tgcgtggcat
ctgagcatct gtggggcact tctctggctg acgctgacag cgccaaggtt gacgggggca
ccgtcgacga cgtcgttgag ctgtatctgc gagaccaccc tcaggcagat ccccaggcca
ccatcgageg tttcatggac atcettgacg ccaacctggc tggccacacc gagecgatge
ccggagctga ccgcctcgtg aagaggctgt caggtcatgt acccatcgct gtggtgtcga
420
attccccgac gcgt
434
<210> 2382
<211> 116
<212> PRT
<213> Homo sapiens
<400> 2382
Met Val Thr Met Tyr Pro Pro Gln Gln Val Asp Ala Val Leu Phe Asp
                                    10
Met Asp Gly Thr Leu Leu Asn Thr Leu Pro Ala Trp Cys Val Ala Ser
                                                     30
                                25
            20
Glu His Leu Trp Gly Thr Ser Leu Ala Asp Ala Asp Ser Ala Lys Val
                                                45
                            40
Asp Gly Gly Thr Val Asp Asp Val Val Glu Leu Tyr Leu Arg Asp His
                        55
                                            60
   50
Pro Gln Ala Asp Pro Gln Ala Thr Ile Glu Arg Phe Met Asp Ile Leu
                                        75
                    70
Asp Ala Asn Leu Ala Gly His Thr Glu Pro Met Pro Gly Ala Asp Arg
                                                        95
                                    90
Leu Val Lys Arg Leu Ser Gly His Val Pro Ile Ala Val Val Ser Asn
                                105
            100
Ser Pro Thr Arg
       115
<210> 2383
<211> 393
<212> DNA
<213> Homo sapiens
<400> 2383
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catgleggea egggeetttg aacaggateg eegtegegtg getateegee gegggtgggg
120
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cagaaaacgc ccactetece ttecceagge geeggeegte gagtegteta egeaacgcae
180
gtctacatag gtgacttttt cataccccca ctttcgtact cggatgggct cggcgtgctc
240
gatgtcggca cgaaaaatta aatgcactga atgcgggttg tcgcacagga tgcatctcgt
300
ctttcttgat gccacccacc ttgttacata ttctgccatg caaaacacct tgtgattttt
ggcggagtgc aacatggtat gtgtatgcca ctg
393
<210> 2384
<211> 125
<212> PRT
<213> Homo sapiens
<400> 2384
Met Leu His Ser Ala Lys Asn His Lys Val Phe Cys Met Ala Glu Tyr
                                    10
                5
1
Val Thr Arg Trp Val Ala Ser Arg Lys Thr Arg Cys Ile Leu Cys Asp
                                                    30
           20
                                25
Asn Pro His Ser Val His Leu Ile Phe Arg Ala Asp Ile Glu His Ala
                            40
       35
Glu Pro Ile Arg Val Arg Lys Trp Gly Tyr Glu Lys Val Thr Tyr Val
                        55
                                            60
Asp Val Arg Cys Val Asp Asp Ser Thr Ala Gly Ala Trp Gly Arg Glu
                    70
Ser Gly Arg Phe Leu Pro His Pro Arg Arg Ile Ala Thr Arg Arg Arg
                                    90
Ser Cys Ser Lys Ala Arg Ala Asp Met Asn Pro Cys Leu Pro Lys Arg
                                105
           100
Pro Arg Ser Phe Val Arg Arg Ser Ser Glu Arg Thr Arg
                            120
       115
<210> 2385
<211> 347
<212> DNA
<213> Homo sapiens
<400> 2385
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gcactgtgct gtggactctt gttgtggggt cctaggtctg cccagcattt tggggttcac
cccgtgaccc tctacgggtt tccatgcccc cagcaccacg tccatcatca tttctggggt
cccctcacct cagagagect gettectatg actgegtggg ccagetggag aaggaegaee
240
caagacccct caagtttctg tgtcctgacc ccaagcatag gcctgagtgc tcctggggcc
caagggcctt tacgcactac tetetggggc ceaetgtetg cactett
347
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<210> 2386

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<211> 109
<212> PRT
<213> Homo sapiens
<400> 2386
Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu
                                    10
1
Cys Cys Gly Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly
                                                    30
           20
Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val
                                                45
                            40
His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met
                                            60
                       55
Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe
                                        75
Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly
                                    90
                85
Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu
                                105
<210> 2387
<211> 715
<212> DNA
<213> Homo sapiens
<400> 2387
neggeegeae tteaeettae ggaggggaga taatgagate aattagagge geegteaeeg
cgccggagac agctgccgcc gcatagtaat cacccgcggg ctgggtgcgc ggggggctccc
cgctacctgc gcgcctgctg ctcccaccac gcggcaccga cccgggcgcg cccccggccc
180
ctgtccgcag cccacageca caccgcgcac cctacaccct ccttgcgcct ctgctgggga
240
geteacece tecactegea cagtgegetg eggeeegggg tgtgggaggt eeegggaett
300
gggttgtgag tgcctgtgtg ggggtagggg caggtgtccg cttgtgcgca tatgggcatg
agtgtacatg gcgtgtgcct ggagatgggc gagtgcaggc tggaatgtgc cggcgtggca
420
cgtgtgtggg cccaaataga tgcgtgtgtg atcacatgtt gtgttcgtgt ttgcacctcg
tgtgcctgtg tgtccgtatt tgagtgctta caggaatgtg ggtggtgagt acccgtatgt
540
gggtgcatct gcacttgtgc gtgtgtgtgt gtaggcgcgt gtgtgtgcgt gtgtgtgtta
ngggatacgt gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt
660
gtttgaggtt tgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag
715
<210> 2388
<211> 58
<212> PRT
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<213> Homo sapiens
 <400> 2388
 Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg
                 5
 1
 Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys
                                 25
 Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser
                             40
        35
 Val Phe Glu Cys Leu Gln Glu Cys Gly Trp
     50
 <210> 2389
 <211> 336
 <212> DNA
 <213> Homo sapiens
 <400> 2389
 ntcaccetge egeeggaagg ttgetegtae egeatggeea tegteaceat gaagaagteg
 tatccgggcc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgcg acagttcatg
 tataccaagt togttatogt caccgacgac gatatcaacg cccgcgactg gaacgacgtg
 atctgggcca tcaccacgcg catggacccc aagcgcgaca cggtgatgat cgataacacg
 ccgatcgact acctcgactt cgcctcgccg gtgtccggcc tgggttcgaa gatggggctc
 gateccaege acaaatggee eggeeacaee accegn
 336
 <210> 2390
 <211> 112
. <212> PRT
 <213> Homo sapiens
 <400> 2390
 Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr
                                     10
 Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val
                                 25
 Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr
                            40
                                                 45
        35
 Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile
                                             60
                        55
 Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr
                                         75
                     70
 Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser
                 85
                                   90
 Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg
                                 105
             100
 <210> 2391
 <211> 388
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1736

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<212> DNA
<213> Homo sapiens
<400> 2391
gtcgactaac ctgcgtacag ccgccaccct acgtttagtc gcgaagcgtg tcggctccat
gttcattccg gagctacacc atgaataaag tactacctga tecacccatc gatcccgcaa
aagaccgcgt cgctttcaac cgcgccatcg accattacct gcctacccag ggcttccact
gcgtcaacga agacctgagt ttcgaagacg ccctgctcta caccgccagc ctgctcgaca
240
gtgcctctgc cacggcgctg gattgcggtg agctgctgca aagccctgaa cgggcgaaga
tcctggccgt gtggcatttg ctggaaattg caaaaaccac cgtagatcgc ttccccatcg
agtgcctgac cgcaccaaag ccctgcct
388
<210> 2392
<211> 102
<212> PRT
<213> Homo sapiens
<400> 2392
Met Asn Lys Val Leu Pro Asp Pro Pro Ile Asp Pro Ala Lys Asp Arg
                                                        15
                                   10
Val Ala Phe Asn Arg Ala Ile Asp His Tyr Leu Pro Thr Gln Gly Phe
                                25
                                                    30
            20
His Cys Val Asn Glu Asp Leu Ser Phe Glu Asp Ala Leu Leu Tyr Thr
                                                45
                            40
        35
Ala Ser Leu Leu Asp Ser Ala Ser Ala Thr Ala Leu Asp Cys Gly Glu
                                            60
                        55
Leu Leu Gln Ser Pro Glu Arg Ala Lys Ile Leu Ala Val Trp His Leu
                                        75
65
Leu Glu Ile Ala Lys Thr Thr Val Asp Arg Phe Pro Ile Glu Cys Leu
                85
Thr Ala Pro Lys Pro Cys
            100
<210> 2393
<211> 411
<212> DNA
<213> Homo sapiens
<400> 2393
aacctgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgctc tgagtccggc
atggtcaccg accccatcac tgcgcgcccg gatatgacca tcgggggaagt agacgcgctg
tgcgcccgct tccgcatctc cggcctgccg gtggtagacg aggacggcac cctgatgggc
atttgcacca cccgcgatat gcgcttcgag cctgactttg accgcaaggt cagcgaggtc
240
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```
atgacggcta tgccgcttgt tgttgcgcgc gagggtgtat ctaagaagga agccctcgaa
ctgctctcgg ccaataaggt ggaaaagctg cccatcgtcg atgcggataa taagctcacc
ggcctgatta ccgtcaagga ctttgtcaag accgagcagt accccaacgc g
<210> 2394
<211> 137
<212> PRT
<213> Homo sapiens
<400> 2394
Asn Leu Ser Thr Glu Asp Gln Ala Glu Gln Val Glu Ile Val Lys Arg
                                    10
1
Ser Glu Ser Gly Met Val Thr Asp Pro Ile Thr Ala Arg Pro Asp Met
           20
                                25
Thr Ile Gly Glu Val Asp Ala Leu Cys Ala Arg Phe Arg Ile Ser Gly
       35
                            40
Leu Pro Val Val Asp Glu Asp Gly Thr Leu Met Gly Ile Cys Thr Thr
                        55
Arg Asp Met Arg Phe Glu Pro Asp Phe Asp Arg Lys Val Ser Glu Val
Met Thr Ala Met Pro Leu Val Val Ala Arg Glu Gly Val Ser Lys Lys
                                                        95
                85
Glu Ala Leu Glu Leu Leu Ser Ala Asn Lys Val Glu Lys Leu Pro Ile
                                105
Val Asp Ala Asp Asn Lys Leu Thr Gly Leu Ile Thr Val Lys Asp Phe
                                                125
                            120
        115
Val Lys Thr Glu Gln Tyr Pro Asn Ala
    130
                        135
<210> 2395
<211> 362
<212> DNA
<213> Homo sapiens
<400> 2395
aagettteag aggagtttge taaagtgtta aggatttgea tatttteaac tttagteata
tctaagtgcc ccaataaaac agcgcggcgc attgggggct ggctttcatc aacaactaac
ttagcaatat taatctgacc ttttcctggt gattgggcat ttagtaataa tgcggggcca
180
atatcatcat actitccaaa tattittgat titttagaca tcaactgaag tigtgaccat
ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcactt
acccaaggat taggcactet aaaggcatga tegegtegat categactee catgtaacge
360
gt
362
<210> 2396
```

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<211> 117
<212> PRT
<213> Homo sapiens
<400> 2396
Met Gly Val Asp Asp Arg Arg Asp His Ala Phe Arg Val Pro Asn Pro
Trp Val Ser Glu Gln Leu Asn Thr Arg Asp Val Cys Leu Asp Cys His
                                25
            20
Gln Asp Lys Asp Ser Lys Trp Ser Gln Leu Gln Leu Met Ser Lys Lys
                            40
Ser Lys Ile Phe Gly Lys Tyr Asp Asp Ile Gly Pro Ala Leu Leu Leu
                                            60
                       55
Asn Ala Gln Ser Pro Gly Lys Gly Gln Ile Asn Ile Ala Lys Leu Val
                    70
Val Asp Glu Ser Gln Pro Pro Met Arg Arg Ala Val Leu Leu Gly His
                                    90
                85
Leu Asp Met Thr Lys Val Glu Asn Met Gln Ile Leu Asn Thr Leu Ala
                                105
            100
Asn Ser Ser Glu Ser
        115
<210> 2397
<211> 449
<212> DNA
<213> Homo sapiens
<400> 2397
nacageacae teegeeteet eegaegatea tagettteae gteggaeatg ateeceegee
tagtgtacta ctggtccttc tccgtccctc cctacgggga ccacacttcc tacaccatgg
aagggtacat caacaacact ctctccatct tcaaagtcgc agacttcaaa aacaaaagca
agggaaaccc gtactctgac ctgggtaacc ataccacatg caggtatcgt gatttccgat
acceaectgg acaececcag gagtataaac acaacateta etattggcat gtgattgcag
ccaagetggc ttttatcatt gtcatggagc acgtcatcta ctctgtgaaa tttttcattt
catatgcaat tecegatgta teaaagegea caaagageaa gateeagaga gaaaaataee
taacccaaaa gcttcttcat gagaatcac
449
<210> 2398
<211> 76
<212> PRT
<213> Homo sapiens
<400> 2398
Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro
                                    10
Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Sèr Pro Ser Ser Lys Ser
```

```
25
           20
Gln Thr Ser Lys Thr Lys Ala Arg Glu Thr Arg Thr Leu Thr Trp Val
                           40
                                               45
       35
Thr Ile Pro His Ala Gly Ile Val Ile Ser Asp Thr His Leu Asp Thr
                                           60
                      55
Pro Arg Ser Ile Asn Thr Thr Ser Thr Ile Gly Met
                   70
<210> 2399
<211> 344
<212> DNA
<213> Homo sapiens
<400> 2399
acgegteatg etteaegaaa egggteaege getteattae eaageagetg geaaaeaeaa
cttgtatttc gagcgggttg cgccagtcga gatcatggag ttcgtggcct actgcttgca
gtttctgacg atcgagcgcc tggccatgtc aggggaactt tcgggtaaag aacaggaact
180
agtcaaaccc tttgctggtc cggccaggct tggaggggtt cgaaaaccta caacgccaca
aaacggttcc agcactgggt ttataaacag cctaaaatcc cgacaagtaa agaactcgat
acceptatege ttgagatege acacaceete eggetegatt egte
<210> 2400
<211> 112
<212> PRT
<213> Homo sapiens
<400> 2400
Met Leu His Glu Thr Gly His Ala Leu His Tyr Gln Ala Ala Gly Lys
                                    10
                5
1
His Asn Leu Tyr Phe Glu Arg Val Ala Pro Val Glu Ile Met Glu Phe
           20
                                25
Val Ala Tyr Cys Leu Gln Phe Leu Thr Ile Glu Arg Leu Ala Met Ser
                                               45
       35
Gly Glu Leu Ser Gly Lys Glu Gln Glu Leu Val Lys Pro Phe Ala Gly
                                           60
                       55
Pro Ala Arg Leu Gly Gly Val Arg Lys Pro Thr Thr Pro Gln Asn Gly
                                    75
                    70
Ser Ser Thr Gly Phe Ile Asn Ser Leu Lys Ser Arg Gln Val Lys Asn
               85
                                    90
Ser Ile Pro Tyr Gly Leu Arg Cys Asp Thr Arg Ser Gly Trp Ile Gly
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Pro Glu Val His Ser Ser Gly His Thr Asp Gln Met Asn Arg Asp Ile
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120
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Gln Glu Leu Glu Lys Pro Gly Arg Asp Pro Arg Pro Glu Phe Lys Thr
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360
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Gly Leu Thr Glu Ala Gln Gly Ser Val Ser Val Leu Arg Ala Leu Gln
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Val Ala Ala Pro Cys Ala Gln Ser Gln Ala Pro Cys Tyr Arg Leu Ala
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Ser Trp Ser Ala Pro Glu Arg Ala Ser Pro Ala Pro Gly Gly Arg Leu
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His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr
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Ala Val Ala Ala Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro
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Lys Cys Val Val Ser Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val
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Asp Cys Lys Ser Lys Gly Pro Arg Trp Ala Ser Val Asn Leu Gly Ile
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                            40
Phe Ile Cys Met Thr Cys Ser Gly Ile His Arg Ser Leu Gly Val His
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Ile Ser Lys Val Arg Ser Ala Thr Leu Asp Thr Trp Leu Pro Glu Gln
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1752

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Asp Cys Asn Met Pro Val Leu Asn Gly Tyr Glu Met Thr Arg Arg Leu
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Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe
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Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu
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Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu
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Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala
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                                                       95
               85
Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu
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Leu Met Arg Arg Leu Ile Asp Glu Leu Leu Ser Ser Cys Gln Ala Ala
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ggagcccaac aagaaagatg ttgtgtccct cctggtgagc gctgtcccag tgcacccgat
aatggcgaag aaaatgtgcc tetttcagga aaagtatagg aaatgagaga agactgtgac
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Phe Leu Leu Ile Trp Ser Val Lys Cys Cys Arg Ala Gln Leu Glu Ala
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Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys
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Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu
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gatgtcctgc tcaatggggt agagacgtcg accggtccgc agccgggtgc gcttgctttg
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actgcggc
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Ile Arg Glu Ser Leu Asn Lys Ala Asp Val Leu Leu Asn Gly Val Glu
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Thr Ser Thr Gly Pro Gln Pro Gly Ala Leu Ala Leu Leu Glu Gln Ala
                                           60
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Val His Glu Leu Asp Gly Thr Gly Asp Ala Asp Pro Arg Ala Ala Glu
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Leu Ala Glu Arg Ala Arg Gln Met Ser Tyr Asp Leu Thr Asp Leu Ala
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                                    90
Ala Ser Val Ala Gly His Ala Ala Arg Ala Glu Ala Asp Pro Gln Arg
                                                   110
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Leu Glu Glu Leu Gly Gly Arg Leu Ala Ala Ile Gln Arg Leu Leu Arg
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attaatgcga aagaagttaa gaactatact gcttcttatg aattagtgag aagtatgcgt
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Leu Leu Ser Glu Gly Asp Ile Asn Leu Ser Asn Val Pro Leu Leu Lys
Asp Ile Ala Thr Thr Ile Glu Leu Leu Lys Glu Leu Gly Ala Thr Ala
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Thr Gln Thr Gln His Cys Val His Ile Asn Ala Lys Glu Val Lys Asn
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240
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Lys Ser Lys Gly Cys Val Trp Asn Thr Ala Val Thr Glu Lys Val Leu
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Phe Ala Gln Ser Ala Arg Pro Leu Leu Leu Ser Leu Met Ser Pro Asp
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Trp Ala Phe Ile Val Pro Cys Thr Glu Ala Ser Leu Ser Pro Arg Ser
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                    70
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Cys Leu Phe Gly Arg Gly Ser Thr Asn Gly Ser Thr Leu Pro Pro Thr
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Pro Thr Ala Arg Pro Ala Gly Pro Val Val Gln Leu Glu Lys Ala Arg
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Leu Leu Ser Ser Pro Ala Leu Cys Cys Ala Gly Ala Leu His Leu Asn
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Phe Arg Gly Lys Pro Gly Lys Arg Leu
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240
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Ala Pro Phe Ile Val Phe Glu Asp Ala Asp Ile Asp Gln Ala Val Gln
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Ala Asn Arg Phe Leu Val His Glu Ser Val Ala Glu Glu Phe Ser Glu
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Lys Leu Val Ala Glu Phe Glu Lys Leu Asn Leu Gly Asn Gly Met Asp
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Glu Gly Ile Thr Cys Gly Pro Leu Val Glu Ser Lys Ala Leu Glu Ser
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Val Leu Asp Gly Asn Arg Trp His Ser Lys Gly Gly Ala Gln Phe Arg
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Glu Met Pro Met Tyr Gly Phe Gly Pro Met Pro Gln Pro Asp Leu Arg
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Asp Leu Arg Gly Ser Ala Pro Arg Pro Pro Leu His Ile Cys Asp Pro
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Val Val Phe Ser Asp Val Asn Ser Met Tyr Leu Ser Ser Thr Glu Pro
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Pro Ala Ala Ala Glu Trp Ala Cys Leu Leu Arg Pro Leu Arg Gly Arg
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Lys Arg Arg Asp Ser Asn Ala Ala Pro Leu Leu Glu Ile Leu Thr Asp
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Gln Cys Leu Thr Tyr Glu Gln Ile Thr Gly Trp Trp Tyr Ser Val Arg
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Gly Gln Ser Glu Val Ala Ala His Ala Cys Ala Ser Met Cys Asp Glu
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Gln Arg Arg Glu Leu Cys Thr Gln Leu Arg Gln Trp Gln Leu Lys
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Val Ile Glu Asn Val Lys Arg Gly Gln His Lys Lys Thr Leu Glu Arg
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Leu Phe Pro Gly Phe Arg Pro Ala Val Glu Ala Cys Tyr Phe Asn Trp
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Cor	71 a		Gly	Glv	Asn	Lve		Len	His	1.vs	Met	_	Pro	Glv	Glv
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Glv		Δla	Lys	Δla	T.eu		Glv	Ala	Glv	Ser		Ser	Lvs	Glv	Ser
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705	212	T v.o	T 011	Taro		T1 a	Lau	n an	T.vg	Leu	I.en	Aen	Δτα	Glu	
GIII	AId	Lys	Deu	725	Lys	116	Deu	изр	730	ДСИ	Deu	лэр	n. g	735	
Gl n	Thr	Wie	Lare		Gin	Thr	ī.em	Ser		Phe	Tvr	Ser	Ser		Ara
GIII	1111	1113	740	110	· · · ·	****	200	745			-1-		750		5
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		•		885	- 3 -	C	C	C	890	Cam	N am	50×	T 011	895	car
GIN	Asp	ser		ser	116	ser	ser	905	ser	Ser	ASP	ser	910	GIY	Ser
c~~	602	202	900	CT v	car	h ra	Ara		Ser	Ala	Ser	Glv		Δla	Ara
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AIG	930	****	vul	0 -u		935		-1-	2,2	0-7	940	5			
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Pro	GIU	vai			Leu	Ala	Asp	1065		Ser	Arg	Ala	1070		ser
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Asn	Mec	vai 1075		HIG	HIG	HIG	1080		AIA	Leu	261	1085		-10	1413
212	uic			Nen	Dro	N c n			Gln	Arg	Δla			Gln	Cvs
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Glu	Ala	Ala	Lys	Glv			Val	Tyr	Pro	Glu		Leu	Phe	Glu	
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Pro Ser Ala Asn Pro Ser Pro Pro Pro Gly Ser His Pro Gln Leu Pro
                         40
      35
Ala Arg Ser Pro Leu Pro Gly Pro Leu Pro Ser Pro Trp Cys Ser Leu
                      55
                                        60
Ser Gln Gly Pro Ser Pro Ser Asp Phe Pro Gln Gly Ser Arg Leu Asp
                                     75
                  70
Leu Glu Leu Cys Leu Pro Val Cys Ala Met Gly Ser Ala Ser Gly Leu
                                  90
Glu Leu Arg Leu Phe Pro Gly Pro Gly Gln Gly Arg Pro Pro Leu Gly
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                             105
Gly Ala Gly Ala Glu Leu Leu Arg Pro Glu Asp Tyr Ser Asp Arg Glu
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                            40
Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg
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                                           60
Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp
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                                       75
Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala
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       35
                           40
Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro
Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe
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Arg Leu Ala Ala Leu Val Ala Glu Leu Val Arg Ala Gln Ala Leu Ile
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Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
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Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
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Leu Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
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                150
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
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Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
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Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
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Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
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<213> Homo sapiens
<400> 2449
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ctactgetet eccetectee etgggeeetg tectatecee agaggeeaga caggeettee
togcatgcaa gagtotocot ogcootgoog gacagtggoo tocatotaco tgcotgtott
getggactee agaacactee agteetttee ceettggggg ttgggggggg ceececettt
ttttccccc ctttccctct tcattccaca ggaggccagc ctcaacatcc ccnccc
<210> 2450
<211> 90
<212> PRT
<213> Homo sapiens
<400> 2450
Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
                                 10
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
          20
                             25
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
                                            45
                         40
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp
```

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55
Gly Leu Gly Gly Ala Pro Pro Phe Phe Pro Pro Leu Ser Leu Phe Ile
                                        75
                   70
Pro Gln Glu Ala Ser Leu Asn Ile Pro Xaa
               85
<210> 2451
<211> 589
<212> DNA
<213> Homo sapiens
<400> 2451
nacgcgtgac tggattgctc aacgggtgag gaatcgagcg gttacgatgt cgggccgatc
tgcaacgatg atcttgtgag cgatgtattg accggtgtgt gggccgatct tgtgggccag
120
gagaaggetg teggggteet gegtegtgee geegaatege ageeggggeg etegteeeat
180acgcatggct cattacgggt ccgcctggat caggtcggtc gaatgctgcg
aaggeetttg cageggeget acagtgegte gaccatggat gegggeagtg caatgeetgt
cgaaccngcc tgtcaggcgc ccatectgac gtcaccctcg tgcgtactga ggcgctgtct
360
attggcgtcg attgaggtcg tgaaatgggt ttgttcgagc gggcgatgaa ttcgggtccc
cggggcgtcc ccagggttgt cgtcgtcgaa gatgccgacc gcatcactga acgcggagct
480
gacgccttgc ttaaagctat cgaggagcct gcgccgaaaa ccgtctggtt gctgtgcc
cctactccag aggacgtcat cgtcacgatc aggtcgagat gtcggcgcc
589
<210> 2452
<211> 121
<212> PRT
<213> Homo sapiens
<400> 2452
Leu Asp Cys Ser Thr Gly Glu Glu Ser Ser Gly Tyr Asp Val Gly Pro
                                   10
                5
Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala
                                                    30
                               25
           20
Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala
                                                45
                           40
       35
Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu
    50
                        55
                                            60
Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe
                                        75
                   70
65
Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala
                                    90
Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg
                                105
           100
Thr Glu Ala Leu Ser Ile Gly Val Asp
                            120
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<210> 2453
<211> 695
<212> DNA
<213> Homo sapiens
<400> 2453
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agattcacac attectacqa gcacacatgt gcctgcatga gttattcccc atgtgaacac
120
acaggttggc acacgcacat gcccctgggt atgctcatgt ccattcatcc atcccagcct
gtgcacgtcc tctcactcct gtgttcacac ctatgcccaa atgaaccaag ggacacacat
gcacaccett atgtggtgca cacacacteg tgcacacgga gccacaccag cacatgetca
gaggcatttg tgtgcgtggg catttgcagc atgactcaga acggagtatg gggtggcgcg
gcgtggctgg ggaggtccca tcageccgcc tctgaaaccc tcccaacctg cccatcctgg
420
cccaggcact gtgtctccgg cttgggcttc agccccggac cccaggacac cccggacaaa
gaggagetge tetegtetga ageetgetae gaatgeagga teaatggeet eteceetegg
540
gaccggccac gacgcagtgc ccacagggac caccaggtga catgggtgct gcactaggca
600
ggggtggcca gggaatgggt gagtgtggga aagaggctgt ggacccgact tagtcatgtc
660
agececega agaaggagea ceaggeteea gatet
<210> 2454
<211> 166
<212> PRT
<213> Homo sapiens
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Met Ser Tyr Ser Pro Cys Glu His Thr Gly Trp His Thr His Met Pro
                                    10
1
Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu
                                                    30
            20
                                25
Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His
                                                45
                            40
        35
Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr
   50
                        55
                                            60
Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr
Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln
                                    90
Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys
                                                    110
                               105
           100
Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys
                                                125
                           120
Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly
```

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135
Leu Ser Pro Arg Asp Arg Pro Arg Arg Ser Ala His Arg Asp His Gln
                  150
Val Thr Trp Val Leu His
              165
<210> 2455
<211> 378
<212> DNA
<213> Homo sapiens
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acgcgtcggc agaagcgtca gctgaccgtc ggagccgatc tgtccccagg cgtcgtcagc
ggaaccgcgc agaaggaaat ccacgcgctg ccgatcatga aggcgctccc catgggcgtc
aaagaactcg ttctgggcga atcgaagtgg caggacgagt tgatcaacaa cttcatcgtc
gegetgtttg caggegtggt gttgetgtte geggtgetgg tgetgetgta eeggegettg
etgeegeegt teateaacgt gatgtegetg geggtggeac egetgggegg gttgategge
ctgtggctga ccaacacgcc gatetegatg ccggtctata tcggcttgat catgctgctc
360
ggcatcgtcg ccaagaat
378
<210> 2456
<211> 126
<212> PRT
<213> Homo sapiens
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Thr Arg Arg Gln Lys Arg Gln Leu Thr Val Gly Ala Asp Leu Ser Pro
Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile
                              25
                                                   30
           20
Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser
       35
Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala
                      5.5
                                           60
  50
Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Leu Tyr Arg Arg Leu
                   70
                                       75
Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly
                                   90
              85
Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val
                               105
Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn
                          120
       115
<210> 2457
<211> 754
<212> DNA
<213> Homo sapiens
```

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<400> 2457
cctaqqaatt taccaccatc aaagacttac attaaccagc tatccatgaa ctcacctgag
atgagegaat gtgacatett geacactetg egatggtett eteggeteeg gateagetee
120
tatgtcaact ggataaagga tcaccttatc aaacagggaa tgaaggctga gcatgctagc
tegettetag aactggeate caccactaag tgtageteag tgaaatatga tgttgaaata
gtagaggaat acttcgctcg acagatetea teettetgta gtatcgactg tgccaccate
300
ttgcagctgc atgaaattcc cagtctgcag tccatctaca cccttgatgc cgcgattcta
360
aaaggcccag gtctttttgg gatgagcatt tttctaagat ggctgctgag actgatcctc
420
ataaqtcqtc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct
atgeategtt caccagagee tatttgetge aaaactttaa tgaagagga acaactgaga
540
aacettecaa ggagaaactg caaggetttg etgetgtttt ggetattgge tetagcaggt
gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgtca gtgcagactg
tgtgtgagtc ctggaacaac atcaatacca atgaatttcc caatattgga tcctggcgca
720
atgeetttge caatgacace atceettcae gegt
754
<210> 2458
<211> 236
<212> PRT
<213> Homo sapiens
<400> 2458
Met Asn Ser Pro Glu Met Ser Glu Cys Asp Ile Leu His Thr Leu Arg
                                    10
Trp Ser Ser Arg Leu Arg Ile Ser Ser Tyr Val Asn Trp Ile Lys Asp
                                25
                                                    30
His Leu Ile Lys Gln Gly Met Lys Ala Glu His Ala Ser Ser Leu Leu
                            40
                                                45
       3.5
Glu Leu Ala Ser Thr Thr Lys Cys Ser Ser Val Lys Tyr Asp Val Glu
                                            60
Ile Val Glu Glu Tyr Phe Ala Arg Gln Ile Ser Ser Phe Cys Ser Ile
                                        75
                    70
65
Asp Cys Ala Thr Ile Leu Gln Leu His Glu Ile Pro Ser Leu Gln Ser
                                    90
Ile Tyr Thr Leu Asp Ala Ala Ile Leu Lys Gly Pro Gly Leu Phe Gly
           100
                                105
Met Ser Ile Phe Leu Arg Trp Leu Leu Arg Leu Ile Leu Ile Ser Arg
                            120
Leu Arg Leu Pro Arg Thr Tyr Phe Gln Pro Arg Cys Asn Ser Leu Thr
                                           140
   130
                       135
Pro Met His Arg Ser Pro Glu Pro Ile Cys Cys Lys Thr Leu Met Lys
```

```
155
                   150
Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
                                   170
              165
Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
                                                   190
           180
                               185
Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
                                              205
                          200
      195
Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
                                          220
                      215
Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
                   230
225
<210> 2459
<211> 382
<212> DNA
<213> Homo sapiens
<400> 2459
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getggtettg agggeggegt egtggetgag aaggtegetg gtetgeeege aggaeaggge
ctcaacgcgg ccaatgacga gtatgtcgac atggtagagg ccggcatcat tgacccggcc
aaggtgaccc gttcggctct gcagaacgcc gcgtccatcg cggccctgtt cctcaccact
gaagccgtca tcgctgacaa gcccgagcct gttaaggetc ccgctggcgg cggtgatatg
300
gacggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgccttcgc tgatttgagt
gggatgccac tttgccccag gc
382
<210> 2460
<211> 110
<212> PRT
<213> Homo sapiens
<400> 2460
Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
               5
                                   10
Ile Ala Ile Asn Ala Gly Leu Glu Gly Gly Val Val Ala Glu Lys Val
                                25
Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
                           40
       35
Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
                       55
                                            60
Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
                   70
Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
                                   90
Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
                                105
           100
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<210> 2461
<211> 558
<212> DNA
<213> Homo sapiens
<400> 2461
teeggacaaa agggtteaat egaagtatgg ttageetttt eeaagtegee aggaeggace
tqcaatqctg tttgtcgtca tgctcggggg caagcaccca cgggctaaaa tcgaaattca
120
cgatgtggta ttcgcagtcg cggatacgct gcaacacacc tacacccaat tgcgcgacgg
180
ctggttcggc agccctaagg tgtgcatatc gatgcgtgga tggccgtcga tggcgtcgac
ggctggaaag tcgaactcag ccagatggcg ccgcctgccg acgcgcatca cctgtacttc
atcaacctcg gcggctacga ggccaacgct tttggcgagg cccatcatta cctgctggtg
gtcgcccggg acaaacagga agccaagcgc aaggggcagc ggcaaatgtt gcaacactgg
420
teccaggeee acacegatgg egtaatggat ategacgaet gettgeegat tgatetggtg
gacggtcgct atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac
540
tacatcatcc tgccgcga
558
<210> 2462
<211> 148
<212> PRT
<213> Homo sapiens
<400> 2462
Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu
                                    10
Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr
                                                    30
           20
                               25
Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn
                           40
                                                45
       35
Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val
                                            60
                       55
Asp Gly Arg Arg Trp Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp
                                        75
65
Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg
               85
                                    90
Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly
                                                    110
           100
                               105
Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Ala Asn Val
                                               125
                           120
Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg
                       135
   130
Leu Leu Ala Asp
145
```

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<210> 2463
<211> 333
<212> DNA
<213> Homo sapiens
<400> 2463
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ttcggcctgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg
ccctatggcg aaacccaggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg
180
ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat
accttgggca ttgccttcct gacgacgacg ctggcgtttc tgctcggtgg tttgagcggt
ttggtcgcgg cgatcaaggg cggttgggtc gac
333
<210> 2464
<211> 106
<212> PRT
<213> Homo sapiens
<400> 2464
Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe
                                    10
                                                        15
                 5
1
Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro
                                25
            20
Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala
                                                45
        35
Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp
                        55
Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala
                                        75
Phe Leu Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu
                85
Val Ala Ala Ile Lys Gly Gly Trp Val Asp
<210> 2465
<211> 434
<212> DNA
<213> Homo sapiens
<400> 2465
nntcatgagg acatttccct catatttggt ggtggtaaat ccctcctggg acacggggaa
atgaccagag gctggcggcc cacctggcag gaacagatgc cagctctgct gcagccatcg
coccttgage gggtggctet gtgeetettt etgeaetget ggtgggtggt getgttgget
gggtgatgga taccggctgc cagagatggc tcaggtgcca gctgctgggc tatctcaggc
240
```

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actggctgct gggctatete gggtgeegge tgetgggeta teteaggege tggetgetge
tgggctgtct cgggtgctgg ctgttgggac gtctcctgtc ctggcactgg gctctcgggt
360
gctgggtgcc agctgctgcc taccttgcac tgggctctgg gcactcactg cactcgggct
420
tttccatctc cgac
434
<210> 2466
<211> 82
<212> PRT
<213> Homo sapiens
<400> 2466
Trp Ile Pro Ala Ala Arg Asp Gly Ser Gly Ala Ser Cys Trp Ala Ile
Ser Gly Thr Gly Cys Trp Ala Ile Ser Gly Ala Gly Cys Trp Ala Ile
            20
                                25
Ser Gly Ala Gly Cys Cys Trp Ala Val Ser Gly Ala Gly Cys Trp Asp
                                                45
                            40
Val Ser Cys Pro Gly Thr Gly Leu Ser Gly Ala Gly Cys Gln Leu Leu
                        55
                                            60
Pro Thr Leu His Trp Ala Leu Gly Thr His Cys Thr Arg Ala Phe Pro
                    70
                                        75
65
Ser Pro
<210> 2467
<211> 306
<212> DNA
<213> Homo sapiens
<400> 2467
atggaeteca ceggeacegg ageagggggt aaggggaaga agggagegge egggegeaag
gtcggcgggc caaggaagaa gtcggtgtcg aggtccgtga aggccggtct ccagttcccc
gtcggccgca tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc
180
gcccccgtct acctcgccgc tgtcctcgaa tacctcgccg ctgaggttct ggagctcgcc
240
ggtaatgctg ccagggacaa caagaagact cgcattattc cgcgccacgt gcttctggcg
300
atccgg
306
<210> 2468
<211> 102
<212> PRT
<213> Homo sapiens
<400> 2468
Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Gly Ala
```

```
10
Ala Gly Arg Lys Val Gly Gly Pro Arg Lys Lys Ser Val Ser Arg Ser
                                25
Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile Gly Arg Tyr Leu
                            40
       35
Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly Ala Pro Val Tyr
                                            60
                        55
Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val Leu Glu Leu Ala
                                        75
                    70
Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His
                                    90
Val Leu Leu Ala Ile Arg
            100
<210> 2469
<211> 489
<212> DNA
<213> Homo sapiens
<400> 2469
gccggcgtgg cacatggctt ccctgaagcc agcattgccc tggccaagga agctttgcag
aacagatgag atttcagctg ggacttgcag ccaagtggga tttggccttt tgggggagaag
ggaaagggca ttcaaaggcc agggacagag tatggtcaaa ggcatggaga tgaggaagag
gggaccagag cagagggtca ggttggaaag cgagttgggg tcaatctgca aaggggctga
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
cagtgggaat gttggagaaa acactttttg gtgtcgttac attgaatctg ctcatctata
agaataaaac tttatttcat agagttattg tatggctcaa aataggtatg aagaattaag
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
aacgtggag
489
<210> 2470
<211> 115
<212> PRT
<213> Homo sapiens
<400> 2470
Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg
                                    10
Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu
                                25
            20
Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val
                            40
                                                45
Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu
    50
                        55
Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys
```

```
75
                    70
Lys Gln Glu His Ser Leu Val Leu Ser Asp His Phe Arg Trp Lys Gly
Ser Gly Asn Val Gly Glu Asn Thr Phe Trp Cys Arg Tyr Ile Glu Ser
            100
                                105
                                                    110
Ala His Leu
        115
<210> 2471
<211> 779
<212> DNA
<213> Homo sapiens
<400> 2471
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ctcacatqqt qqcccttqac ttctttcaca qtgaggacct ctgcttcatg aggctcataa
gaagaggagc taaggactat tttgtcatgg gggcgccaat ccactgcatc ttctactata
atteteteat tteetgagge aatateaget eeaagatgtg teeaggagtt ettaggataa
gcactgtaaa gatgaacttt cccataaacc ccaattgttc ctgggtcaat atgaattcca
ttcatacggt cacaaaagac tccctctgag gctctaagga gaatcagaag cttttgttcc
ttttctaagg gattttctaa agtaccaact ttcagctccc cgcctgcaat gaccatgcat
420
gccacactca gaacattgct tctgtccaca gggaagtcta aggtccccat cacatacagc
480
cctttgaaga attggaaaat ctgtatccac aaggacagtt ctgttgggta aaatgagaac
gtcatcccca gggcctggaa tggtattgtt gtatcctccc cagccttctt caacaccttg
ccatgtttca gggagggacc attttaaagc tgattcaggg gcagaggtag aagctgaaat
agttgggggc atacetteet teaceeggag aatgaettga aettggeett cacetaaaac
cagataggtg agttgcctca gctggctatt gaagaaccag tcacagcctt ggttctggc
779
<210> 2472
<211> 181
<212> PRT
<213> Homo sapiens
<400> 2472
Met Thr Phe Ser Phe Tyr Pro Thr Glu Leu Ser Leu Trp Ile Gln Ile
Phe Gln Phe Phe Lys Gly Leu Tyr Val Met Gly Thr Leu Asp Phe Pro
                                25
Val Asp Arg Ser Asn Val Leu Ser Val Ala Cys Met Val Ile Ala Gly
                            40
Gly Glu Leu Lys Val Gly Thr Leu Glu Asn Pro Leu Glu Lys Glu Gln
```

```
55
Lys Leu Leu Ile Leu Leu Arg Ala Ser Glu Gly Val Phe Cys Asp Arg
Met Asn Gly Ile His Ile Asp Pro Gly Thr Ile Gly Val Tyr Gly Lys
                                    90
               85
Val His Leu Tyr Ser Ala Tyr Pro Lys Asn Ser Trp Thr His Leu Gly
                               105
                                                    110
           100
Ala Asp Ile Ala Ser Gly Asn Glu Arg Ile Ile Val Glu Asp Ala Val
                                                125
       115
                           120
Asp Trp Arg Pro His Asp Lys Ile Val Leu Ser Ser Ser Tyr Glu
                                            140
                       135
   130
Pro His Glu Ala Glu Val Leu Thr Val Lys Glu Val Lys Gly His His
                                        155
                    150
Val Arg Ile Tyr Glu Arg Leu Lys His Arg His Ile Gly Ser Val His
                                    170
               165
Val Thr Glu Asp Gly
           180
<210> 2473
<211> 698
<212> DNA
<213> Homo sapiens
<400> 2473
nngtgcacca agaaatggca gcctgacaag ctggtggtgg tatggactcg gcggaaccga
cgcatctgct ccaaggccca cagctggcag ccgnnggcat ccagaaccca taccggggca
ccgtggtgtg gatggtacnc tgagaatgtg gacatctctg tgaccctcta cagggacccc
cacgtggacc agtatgaggc caaagagtgg acatttatta ttgaaaatga gtctaagggg
cageggaagg tgetggeeac ggeegaggtg gacetggeec geeatgeeag ggeeegtgee
ntgtccaagt ccncactgag gctgcggctg aagccaaagt cagtgaagac ggtgcaggct
gagetgagee teactettte eggggtgetg etgegggagg geegtgeeae ggaegatgae
atgeagagte tegeaageet catgagtgtg aageetagtg atgtgggcaa ettggatgae
480
tttgctgaga gtgatgaaga tgaggctcat ggcccaggag ccccggaggc ccgggctcga
gtcccccagc caggtgggct cacagcctgc tgtggatcga gactgccaag acctggggag
ggagggttac ccgggccacc agccacttgc tgtgcccgcc ctgtgatggg aactcattac
tgcccaggca gtcccaacca acccagcagc ctcaattg
698
<210> 2474
<211> 232
<212> PRT
<213> Homo sapiens
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<400> 2474

```
Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Trp Thr
Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa
                                                   30
           20
                               25
Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu
                                               45
                           40
       35
Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln
                                           60
                       55
Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly
                  70
                                       75
Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala
                                   90
               85
Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro
                               105
           100
Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly
                                              125
                           120
       115
Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu
                                           140
                       135
Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp
                   150
                                       155
Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu
                                  170
              165
Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly
                                                  190
           180
                              185
Ser Arg Leu Pro Arg Pro Gly Glu Gly Gly Leu Pro Gly Pro Pro Ala
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                                               205
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Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser
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Pro Asn Gln Pro Ser Ser Leu Asn
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<210> 2475
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ggctcggcca cgggctgccc gccccgctgc gagtgctccg cccaggaccg cgctgtgctg
180
tgccaccgca agcgctttgt ggcagtcccc gagggcatcc ccaccgagac gcgcctgctg
gacctaggca agaaccgcat caaaacgctc aaccaggacg agttcgccag cttcccgcac
ctggaggagc tggagctcaa cgagaacatc gtgagcgccg tggagcccgg cgccttcaac
aacctettea accteeggae getgggtete egeageaace geetgaaget cateeegeta
ggcgtcttca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcgtt
480
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atcctactqq actacatgtt tcaggacctg tacaacctca agtcactgga ggttggcgac
aatgacctcg totacatote teacegegee tteageggee teaacageet ggagcagetg
acgetggaga aatgeaacet gaceteeate eccaeegagg egetgteeea eetgeaegge
ctcatcgtcc tgaggctccg gcacctcaac atcaatgcca tccgggacta ctccttcaag
720
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780
cccaactgcc tctacggcct caacctgacg tccctgtcca tcacacactg caatctgacc
840
gctgtgccct acctggccgt ccgccaccta gtctatctcc gcttcctcaa cctctcctac
aaccccatca gcaccattga gggctccatg ttgcatgagc tgctccggct gcaggagatc
cagetggtgg gegggeaget ggeegggtgg agecetgeet teegeggeet caactacetg
1020
cgcgtgctca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg
1080
gtgggcaacc tggagacact catectggac tecaaccege tggcctgcga ctgtcggctc
1140
ctgtgggtgt teeggegeeg tggectacaa acttcaaccg geageageee acgtgegeea
1200
egeceqagtt tqteeagggg caaggagtte aaggaettee etgatgtget a
1251
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<211> 417
<212> PRT
<213> Homo sapiens
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Arg Ser Met Pro Ser Pro Leu Leu Ala Cys Trp Gln Pro Ile Leu Leu
            20
                                25
                                                    30
Leu Val Leu Gly Ser Val Leu Ser Gly Ser Ala Thr Gly Cys Pro Pro
                                                45
                            40
       35
Arg Cys Glu Cys Ser Ala Gln Asp Arg Ala Val Leu Cys His Arg Lys
                                            60
   50
                        55
Arg Phe Val Ala Val Pro Glu Gly Ile Pro Thr Glu Thr Arg Leu Leu
                                        75
                    70
65
Asp Leu Gly Lys Asn Arg Ile Lys Thr Leu Asn Gln Asp Glu Phe Ala
                85
                                    90
Ser Phe Pro His Leu Glu Glu Leu Glu Leu Asn Glu Asn Ile Val Ser
           100
                                105
Ala Val Glu Pro Gly Ala Phe Asn Asn Leu Phe Asn Leu Arg Thr Leu
                                                125
                            120
Gly Leu Arg Ser Asn Arg Leu Lys Leu Ile Pro Leu Gly Val Phe Thr
                                            140
                        135
   130
Gly Leu Ser Asn Leu Thr Lys Leu Asp Ile Ser Glu Asn Lys Ile Val
                                        155
145
                   150
Ile Leu Leu Asp Tyr Met Phe Gln Asp Leu Tyr Asn Leu Lys Ser Leu
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170

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Glu Val Gly Asp Asn Asp Leu Val Tyr Ile Ser His Arg Ala Phe Ser
                          185
          180
Gly Leu Asn Ser Leu Glu Gln Leu Thr Leu Glu Lys Cys Asn Leu Thr
                                          205
                        200
      195
Ser Ile Pro Thr Glu Ala Leu Ser His Leu His Gly Leu Ile Val Leu
            215
                                       220
Arg Leu Arg His Leu Asn Ile Asn Ala Ile Arg Asp Tyr Ser Phe Lys
                                  235
          230
225
Arg Leu Tyr Arg Leu Lys Val Leu Glu Ile Ser His Trp Pro Tyr Leu
                      250
              245
Asp Thr Met Thr Pro Asn Cys Leu Tyr Gly Leu Asn Leu Thr Ser Leu
                            265
                                              270
          260
Ser Ile Thr His Cys Asn Leu Thr Ala Val Pro Tyr Leu Ala Val Arg
                         280
                                           285
His Leu Val Tyr Leu Arg Phe Leu Asn Leu Ser Tyr Asn Pro Ile Ser
                                        300
                     295
Thr Ile Glu Gly Ser Met Leu His Glu Leu Leu Arg Leu Gln Glu Ile
                  310
                             315
Gln Leu Val Gly Gly Gln Leu Ala Gly Trp Ser Pro Ala Phe Arg Gly
                                           335
                                330
              325
Leu Asn Tyr Leu Arg Val Leu Asn Val Ser Gly Asn Gln Leu Thr Thr
                                              350
          340
                   345
Leu Glu Glu Ser Val Phe His Ser Val Gly Asn Leu Glu Thr Leu Ile
                                           365
                         360
      355
Leu Asp Ser Asn Pro Leu Ala Cys Asp Cys Arg Leu Leu Trp Val Phe
                                        380
   370
           375
Arg Arg Arg Gly Leu Gln Thr Ser Thr Gly Ser Ser Pro Arg Ala Pro
                390
                                    395
Arg Pro Ser Leu Ser Arg Gly Lys Glu Phe Lys Asp Phe Pro Asp Val
Leu
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<211> 548
<212> DNA
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aagtgtgagg agttcccgtc cagcctgtca tcagtctccc caggtcttga agcggcggcc
ctgctcctgg ccgtgaccat ggaccctctg gagaccccta tcaaggatgg catcctctac
cagcagcatg tcaagtttgg caagaagtgc tggcggaagg tgtggggctct gctgtatgca
ggaggcccat caggcgtggc acggctggag aactgggagg tccgggatgg tggcctggga
gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catccgcctg
420
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gctgactgtg tgtccgtgct gccggctgac ggcgagagct gcccccgggga caccggtgcc
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atgggccc
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<210> 2478<211> 113
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Leu Glu Thr Pro Ile Lys Asp Gly Ile Leu Tyr Gln Gln His Val Lys
1
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Phe Gly Lys Lys Cys Trp Arg Lys Val Trp Ala Leu Leu Tyr Ala Gly
                                25
Gly Pro Ser Gly Val Ala Arg Leu Glu Asn Trp Glu Val Arg Asp Gly
                            40
Gly Leu Gly Ala Ala Gly Asp Arg Ser Ala Gly Pro Gly Arg Arg Gly
                                            60
                        55
Glu Arg Arg Val Ile Arg Leu Ala Asp Cys Val Ser Val Leu Pro Ala
                                       75
                   70
Asp Gly Glu Ser Cys Pro Arg Asp Thr Gly Ala Phe Leu Leu Thr Thr
               85
                                   90
Thr Glu Arg Ser His Leu Leu Ala Ala Gln His Arg Gln Ala Trp Met
                                105
            100
Gly
<210> 2479
<211> 324
<212> DNA
<213> Homo sapiens
<400> 2479
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aggtactgga atgacaatga agcagcagaa aggcttgcgt tgatgtgggc taaaaccttc
180
aaatatgcgt cgataaacgt ctcctggcag accgggatta gcaatagcga cgacgagggc
aatgaagatg aagacatgtt ctacgccggt atctccattc cgctgggagg cggggcgtac
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324
<210> 2480
<211> 108
<212> PRT
<213> Homo sapiens
<400> 2480
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Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys
                                    10
                5
Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr
           20
Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala
                                               45
       35
                            40
Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser
                        55
Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly
                    70
                                        75
Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly
                                   90
               85
Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr
                                105
<210> 2481
<211> 484
<212> DNA
<213> Homo sapiens
<400> 2481
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agecetaaag geaagegtat tgaagetegt tteeetgate caacegetaa eccataceta
gcattttcag ctatgttgat ggctggtatc gatggtatca aaaacaagat tcaccctggc
gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc tatccctcaa
gttgctagca gcttagaaga agcgcttaag tgcctagatc aagaccgtga gttcttgact
caaggtggcg ttttctctga cgacatgatc gatgcttaca tcgctcttaa agcagaagaa
gcacagcgtg ttgcaatgac aacaacacca cttgagttcg aactttacta cagcctataa
480
gctt
484
<210> 2482
<211> 159
<212> PRT
<213> Homo sapiens
<400> 2482
Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly
                                    10
Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala
           20
                               25
Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu
                                                45
       35
                           40
Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala
                                         . 60
   50
                        55
```

```
Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly
Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala
Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu
                                105
           100
Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp
                                                125
                           120
Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val
                                            140
                       135
   130
Ala Met Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu
                    150
                                        155
<210> 2483
<211> 477
<212> DNA
<213> Homo sapiens
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cgtccccagc cgcttcctcc tggccttgtt cccccttccc tgtgaaggag agaacagttt
cggctggccc tgagatgctg gcaggcctgc agtcagggca gtgggcgcct cccaccttga
240
aatggtcctt cgtggtgcag ttctgcttac ggggtagact ttgttgcctt ccacagagga
300
cagttagggt gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag
aagtgggaat tetetegtge eetggagtet gggaatgeat tittagtite eeagetteag
gtagaattga aattgagtga gccaacccac cacatccatc tggagccagg aactagt
477
<210> 2484
<211> 130
<212> PRT
<213> Homo sapiens
<400> 2484
Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn
                                    10
                 5
1
Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu
            20
                                25
Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys
        35
Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys
Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr
                                        75
Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Ala Gly Asp Ala Gly Asp
                85
                                    90
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```
Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser
           100
                                105
Pro Glu Gly Pro Gln Ala Arg Val Arg Arg Glu Arg Glu Glu Pro Arg
                            120
                                                125
       115
Phe Gly
   130
<210> 2485
<211> 608
<212> DNA
<213> Homo sapiens
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aagacccgcg actgcaacga ggtgctcttt gtcgatgcag ttgaacatcg ctggatcgag
gagetgggtg gtatgaactt catggccatc agcaaagacg gtcagetegt cacceegag
ctagctggca ccatcctgcg tggcgtgacc cgcaagtcca ttctggaagt tgcccccgac
ctcqqtcttq aaccagtgga gcgcaagatc gatgttgacg agctccttga tggcgttcgc
totggcgagt tocoggaagt ottogootgt ggtaccgccg cggttgtcac accgatcggc
tctttcctag atggagatac cgacgtgaag gtctctgagc ccaccggaaa gaccacgatg
gagatecgte geogtetget ggatatecag theggaegeg etgaggaeae ecatggetgg
ttgaagcgag tctgctgacg gcgtcgacga ccattggggc cggccccaat gatgtgttca
cgatcgggct acgacggtgt cgatgacaat gtcttgcggc tggaaggttt gcccgacggt
600
gaacgcgt
608
<210> 2486
<211> 165
<212> PRT
<213> Homo sapiens
<400> 2486
Thr Gly Glu Ala Lys Cys Gly Gly Asn Tyr Ala Ala Ser Leu Arg Ser
                                    10
1
                 5
Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp
                                25
Ala Val Glu His Arg Trp Ile Glu Glu Leu Gly Gly Met Asn Phe Met
                            40
       35
Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr
                                            60
Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp
                    70
Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu
                                    90
                                                        95
                85
```

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Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr
                                                 110
                             105
           100
Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp
                                               125
                           120
Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg
                      135
                                           140
Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp
145
                 150
Leu Lys Arg Val Cys
               165
<210> 2487
<211> 339
<212> DNA
<213> Homo sapiens
<400> 2487
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aaggaggccg caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggccgtgccc
180
cagctgggag gggctgctcc tcaggctcct gctgcccacc aaaagcccga ggcctcagtg
gagcaggcct ttggggagct gacacgggtc agcacggaag ttgctcaact gaaggaacag
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<210> 2488
<211> 113
<212> PRT
<213> Homo sapiens
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Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro
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               5
1
Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu
           20
                               25
Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp
       35
                           40
Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly
                       55
                                           60
Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val
Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln
                                   90
               85
Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val
           100
                               105
His
<210> 2489
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1788

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<211> 594
<212> DNA
<213> Homo sapiens
<400> 2489
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aactggctgg tcaccatcta tcacggccgg gtgcgtatca ccagccaggt tctttggacc
ctgggcttca tggtgacctt cgcgatcgga ggcatgaccg gcgtactgct ggccatcccg
180
ggtgctgact tcgtactgca caacagcctg ttcggaattg ctcacttcca caacgtgatc
240
atcggcggcg cagtattcgg ctacatcgca ggtttcagct tctacttccc gaaagcgttc
ggetteaage tgeacgaaag etggggeaag getgeattet ggttetggat etegggette
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qccccccca cccctgagtg ggtcccgtac ctgtacgttg ccatggtcgg tgcactgatg
480
ategetgteg gtategeetg ccagttgatt cagetgtatg tcagegtgeg tgategeaag
cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccctggaatg gtcg
<210> 2490
<211> 198
<212> PRT
<213> Homo sapiens
<400> 2490
Xaa Ala Phe Phe Gly Leu Ala Thr Met Leu Ile Ser Ile Pro Thr Gly
                                  10
Val Lys Leu Phe Asn Trp Leu Val Thr Ile Tyr His Gly Arg Val Arg
                                25
           20
Ile Thr Ser Gln Val Leu Trp Thr Leu Gly Phe Met Val Thr Phe Ala
                                               45
                           40
Ile Gly Gly Met Thr Gly Val Leu Leu Ala Ile Pro Gly Ala Asp Phe
                        55
   50
Val Leu His Asn Ser Leu Phe Gly Ile Ala His Phe His Asn Val Ile
                                        75
                   70
Ile Gly Gly Ala Val Phe Gly Tyr Ile Ala Gly Phe Ser Phe Tyr Phe
                                    90
Pro Lys Ala Phe Gly Phe Lys Leu His Glu Ser Trp Gly Lys Ala Ala
                               105
           100
Phe Trp Phe Trp Ile Ser Gly Phe Phe Val Ala Phe Met Pro Leu Tyr
       115
                           120
                                               125
Ala Leu Gly Phe Met Gly Met Thr Arg Cys Leu Asn Ala Pro Pro Thr
                                           140
                       135
Pro Glu Trp Val Pro Tyr Leu Tyr Val Ala Met Val Gly Ala Leu Met
                   150
                                       155
Ile Ala Val Gly Ile Ala Cys Gln Leu Ile Gln Leu Tyr Val Ser Val
                                    170
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Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala
           180
                                185
His Thr Leu Glu Trp Ser
       195
<210> 2491
<211> 592
<212> DNA
<213> Homo sapiens
<400> 2491
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120
gatettgcag tgttcgaaag eggaaetgta tteegegeeg teaeteegge tgeggeaeeg
180
cgtcccggtg tcgacgagcg cccctccgat gaagtccttg ccgagatcga cgccgccttg
ccagcccage egegeatget egeggeegtg atetgtggea getggetgee egategetgg
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gatgctcttg gcgtgaggct ggtgcgcaag gctgaccgtc aggctccatg gcatcccggt
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acagtagtgt cgaaggctgg totgcotcag ogcacotgtg cggtcgagtt caatotagat
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592
<210> 2492
<211> 197
<212> PRT
<213> Homo sapiens
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                                    10
Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr
                                25
            20
Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly
                            40
                                                45
Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val
                        55
Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu
                    70
                                        75
Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu
                85
Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala
            100
                                105
                                                    110
Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val
                                                125
                            120
        115
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```
Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala
                                           140
   130
                       135
Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro
                                       155
145
                   150
Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu
                                                       175
                                 170
               165
Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Glu Val
                               185
                                                   190
           180
Met Val Ile Ser Arg
       195
<210> 2493
<211> 418
<212> DNA
<213> Homo sapiens
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ctategaact accteatget egaaceteat teggteatea agaceatega etetteeeta
cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagtg
atcccgctgg ttgaaaatgc caacctagac accgtgtggc tggggttgcg cgtcattggc
aagggegeea ggeggggage egacegetet teeteggtet acetecaget gaegteggtg
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<210> 2494
<211> 139
<212> PRT
<213> Homo sapiens
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Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro
                                 10
Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg
                               25
                                                   30
Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu
                                               45
                           40
Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser
                       55
                                           60
Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val
                                       75
                   70
65
Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu
                                   90
                                                       95
Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser
                                                  110
          100
                               105
Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala
                           120
                                               125
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Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile
    130
                        135
<210> 2495
<211> 1478
<212> DNA
<213> Homo sapiens
<400> 2495
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agtoctoccg ccaggtoccg cggcccgcac ctgccgcccg cacctgcagc tccgcacctg
120
eggecagtge ctactgeect etettgeege eegeacetge ageceegeac etgeegettg
cacctgcage eccgegetet acceggttea ageatggetg accaggegee ettegacaeg
240
gacgtcaaca ccctgacccg cttcgtcatg gaggagggca ggaaggcccg cggcacgggc
gagttgaccc agctgctcaa ctcgctctgc acagcagtca aagccatctc ttcggcggtg
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540
aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc
cttgtgtccg ttggaaccat ttttggcatc tatagaaaga aatcaactga tgagccttct
660
gagaaggatg ctctgcaacc aggccggaac ctggtggcag ccggctacgc actgtatggc
agtgccacca tgctggtcct tgccatggac tgtggggtca actgcttcat gctggacccg
780
gccatcgggg agttcatttt ggtggacaag gatgtgaaga taaaaaagaa aggtaaaatc
tacageetta aegagggeta egecaaggae tttgaeeetg eegteaetga gtacateeag
aggaagaagt tecececaga taatteaget eettatgggg eeeggtatgt gggeteeatg
960
gtggctgatg ttcatcgcac tctggtctac ggagggatat ttctgtaccc cgctaacaag
1020
aagagcccca atggaaagct gagactgctg tacgaatgca accccatggc ctacgtcatg
1080
gagaaggctg ggggaatggc caccactggg aaggaggccg tgttagacgt cattcccaca
1140
gacattcacc agagggegec ggtgatettg gggtececeg acgaegtget egagtteetg
1200
aaggtgtatg agaagcactc tgcccagtga gcacctgccc tgcctgcatc cggagaattg
1260
cototacotg gacottttgt otcacacago agtacootga cotgotgtgo acottacatt
1320
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cctagagagc agaaataaaa agcatgacta tttccaccat caaatgctgt agaatgcttg

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gcactcccta accaaatgct gtctccataa tgccactggt gttaagatat attttgagtg
gatggaggag aaataaactt attcctcctt aaaaaaaa
<210> 2496
<211> 338
<212> PRT
<213> Homo sapiens
<400> 2496
Met Ala Asp Gln Ala Pro Phe Asp Thr Asp Val Asn Thr Leu Thr Arg
Phe Val Met Glu Glu Gly Arg Lys Ala Arg Gly Thr Gly Glu Leu Thr
          20
                            25
Gln Leu Leu Asn Ser Leu Cys Thr Ala Val Lys Ala Ile Ser Ser Ala
                                           45
Val Arg Lys Ala Gly Ile Ala His Leu Tyr Gly Ile Ala Gly Ser Thr
                     55
                                        60
Asn Val Thr Gly Asp Gln Val Lys Lys Leu Asp Val Leu Ser Asn Asp
                                    75
                  70
Leu Val Met Asn Met Leu Lys Ser Ser Phe Ala Thr Cys Val Leu Val
                                90
             85
Ser Glu Glu Asp Lys His Ala Ile Ile Val Glu Pro Glu Lys Arg Gly
                            105 110
          100
Lys Tyr Val Val Cys Phe Asp Pro Leu Asp Gly Ser Ser Asn Ile Asp
                        120
     115
Cys Leu Val Ser Val Gly Thr Ile Phe Gly Ile Tyr Arg Lys Lys Ser
                     135
                                     140
Thr Asp Glu Pro Ser Glu Lys Asp Ala Leu Gln Pro Gly Arg Asn Leu
                                   155
                150
145
Val Ala Ala Gly Tyr Ala Leu Tyr Gly Ser Ala Thr Met Leu Val Leu
                                170
              165
Ala Met Asp Cys Gly Val Asn Cys Phe Met Leu Asp Pro Ala Ile Gly
                            185
                                           190
          180
Glu Phe Ile Leu Val Asp Lys Asp Val Lys Ile Lys Lys Lys Gly Lys
                                           205
                        200
      195
Ile Tyr Ser Leu Asn Glu Gly Tyr Ala Lys Asp Phe Asp Pro Ala Val
                               220
                  215
Thr Glu Tyr Ile Gln Arg Lys Lys Phe Pro Pro Asp Asn Ser Ala Pro
                                    235
         230
Tyr Gly Ala Arg Tyr Val Gly Ser Met Val Ala Asp Val His Arg Thr
                      250 255
              245
Leu Val Tyr Gly Gly Ile Phe Leu Tyr Pro Ala Asn Lys Lys Ser Pro
                                              270
          260 265
Asn Gly Lys Leu Arg Leu Leu Tyr Glu Cys Asn Pro Met Ala Tyr Val
                                           285
                         280
Met Glu Lys Ala Gly Gly Met Ala Thr Thr Gly Lys Glu Ala Val Leu
                  300
Asp Val Ile Pro Thr Asp Ile His Gln Arg Ala Pro Val Ile Leu Gly
                                    315
                  310
Ser Pro Asp Asp Val Leu Glu Phe Leu Lys Val Tyr Glu Lys His Ser
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335
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                                    330
Ala Gln
<210> 2497
<211> 399
<212> DNA
<213> Homo sapiens
<400> 2497
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cttggctacc tgccacagga tccccgcgac ccagacatgg aaatgatcgc gagggcaagg
120
atcctgtcag cgcgtggcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag
atggcgaacg gttccgagga cgaccgtgcc gttgcgatgg acaaatacgc gaaggctgaa
gaccgtctcg tcgcggccgg tggctatggc gcctctgcag aggcagcccg aatcgcgtcg
aacttggggc ttgacgaccg cgtcctttcc cagccgttga aaaacctctc gggtggtcag
cqtcqtcqcg tcqagctggc gcgcatcctc ttttccgga
399
<210> 2498
<211> 133
<212> PRT
<213> Homo sapiens
<400> 2498
Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg
                                    10
1
Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp
            20
                                25
Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp
His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly
                       55
   50
Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu
                                       75
                    70
Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala
                                    90
                85
Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro
                                                    110
                               105
            100
Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg
                           120
                                                125
       115
Ile Leu Phe Ser Gly
   130
<210> 2499
<211> 348
<212> DNA
<213> Homo sapiens
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<400> 2499
nggccgggcg aagacccgtt ctatatggcc taccacgaca ccgagtgggg cgtgccggaa
tatgacgacc gegeattgta egagaagete attetegacg gatteeagge eggeetgteg
tggatcacca teetgegeaa gegegacaae tttegeaaag cettegaega ttteeagece
180
gagaagatag cgcgttacaa tgagaagaag gttcacgcgc tgatgaacga tgccggcatc
240
gtgcgcaacc gcgccaagat cgaaggcacg atcgccagcg cgaaggcgta tctcgacatc
300
atggaaaaag gcccgggctt ctccaggctg ctgtgggact tcgtcgac
348
<210> 2500
<211> 116
<212> PRT
<213> Homo sapiens
<400> 2500
Xaa Pro Gly Glu Asp Pro Phe Tyr Met Ala Tyr His Asp Thr Glu Trp
                                                         15
                 5
                                    10
Gly Val Pro Glu Tyr Asp Asp Arg Ala Leu Tyr Glu Lys Leu Ile Leu
                                25
            20
Asp Gly Phe Gln Ala Gly Leu Ser Trp Ile Thr Ile Leu Arg Lys Arg
                                                 45
        35
                            40
Asp Asn Phe Arg Lys Ala Phe Asp Asp Phe Gln Pro Glu Lys Ile Ala
                                            60
Arg Tyr Asn Glu Lys Lys Val His Ala Leu Met Asn Asp Ala Gly Ile
                                        75
                    70
Val Arg Asn Arg Ala Lys Ile Glu Gly Thr Ile Ala Ser Ala Lys Ala
                                    90
Tyr Leu Asp Ile Met Glu Lys Gly Pro Gly Phe Ser Arg Leu Leu Trp
                                105
           100
Asp Phe Val Asp
        115
<210> 2501
<211> 569
<212> DNA
<213> Homo sapiens
<400> 2501
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taatqcccat taaqccactc catacacttc tttaaatagg aaaatatatg taaagtacgt
acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggtatgg
ctttcaagag tcaaacaatt ttactggtgc atcatttcca tttattcttt ctcttttgca
taataaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaag
300
```

```
tagattetat agetteaact eeetgaagag atgtgtgeta atttacatea aaaaaateet
taagggtata aaatatgcca agaactgtca acatcacaga ttaccactgg tagcttctgg
tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct
acactaagtt tatatactgt atttaacagt gtaattttca aatatgacag gaataaccca
gatgtgaaat gctgaatcat taatcacag
569
<210> 2502
<211> 100
<212> PRT
<213> Homo sapiens
<400> 2502
Met Ile Ala Gly Val Arg Tyr Gly Phe Gln Glu Ser Asn Asn Phe Thr
                                    10
Gly Ala Ser Phe Pro Phe Ile Leu Ser Leu Leu His Asn Lys Thr Thr
                                25
            20
Leu Lys Ile Leu Pro Trp Leu Val Arg Asp Asn Ser Ser Leu Glu Ser
                            40
                                                45
       35
Arg Phe Tyr Ser Phe Asn Ser Leu Lys Arg Cys Val Leu Ile Tyr Ile
    50
                        55
Lys Lys Ile Leu Lys Gly Ile Lys Tyr Ala Lys Asn Cys Gln His His
                                        75
                    70
Arg Leu Pro Leu Val Ala Ser Gly Ile Leu Leu Ser Phe His Leu Ile
Phe Lys Gly His
           100
<210> 2503
<211> 419
<212> DNA
<213> Homo sapiens
<400> 2503
gecacgecag ceatetacce ttteetegae tegecaaata agtatteaet gaacatgtae
60
aaggeettge taceteagea gteetaeage ttggeeeage egetgtatte teeagtetge
120
accaatgggg agegetttet etacetgeeg ceaecteact aegteggtee ceaeateeca
togtoottgg catcacccat gaggeteteg acacettegg cetececage catceegeet
ctcgtccatt gcgcagacaa aagcctcccg tggaagatgg gcgtcagccc tgggaatcct
300
gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tccctctgcc
aaggeggtea ceagtggeet geegggggae acagetetee tgttgeeeee eteaegegt
419
<210> 2504
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1796

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<211> 121
<212> PRT
<213> Homo sapiens
Met Tyr Lys Ala Leu Leu Pro Gln Gln Ser Tyr Ser Leu Ala Gln Pro
                                   10
Leu Tyr Ser Pro Val Cys Thr Asn Gly Glu Arg Phe Leu Tyr Leu Pro
                               25
                                                  30
Pro Pro His Tyr Val Gly Pro His Ile Pro Ser Ser Leu Ala Ser Pro
                           40
                                                45
       35
Met Arg Leu Ser Thr Pro Ser Ala Ser Pro Ala Ile Pro Pro Leu Val
                                           60
                       55
His Cys Ala Asp Lys Ser Leu Pro Trp Lys Met Gly Val Ser Pro Gly
                                       75
                   70
Asn Pro Val Asp Ser His Ala Tyr Pro His Ile Gln Asn Ser Lys Gln
               85
Pro Arg Val Pro Ser Ala Lys Ala Val Thr Ser Gly Leu Pro Gly Asp
                              105
           100
Thr Ala Leu Leu Leu Pro Pro Ser Arg
       115
<210> 2505
<211> 540
<212> DNA
<213> Homo sapiens
<400> 2505
teeggageea ateegaetea ggeeetegte tggageeagg tgetgttgag eatggggttg
cogotogtgt tggtgccgtt ggctcggttc accggcgatc ggcgtctgat gggccaatgg
acgaatgggc gtgtcatggc cgccatcgcg tggatcgtcg tggcagcagt ctcggctctc
180
aacgtggttc tcgtcgtcga gacggtcatg ggtgcatgat ccttgagggc agttttctgg
cgacaatcgt gaaaatgagt gacaaactca agcgggtgac gacgccgaac cccgcaccga
cetetgecea egagetagee aacgatttgg ceaetgeatt tegegggtae cetgetggag
tggcgatcct cacgacgatg ggagcggctg ggcccgaggg cttgacggtc tcctccctgg
420
cgtcggtgtc agtcgtcccg gctgttgtgt cggtgtcgtt gggtaatggt tcgacgaccc
tggccaccct gacggaggag tcccgcgtca tcgtccacat gcttgatgca gatcgcgcgc
540
<210> 2506
<211> 72
<212> PRT
<213> Homo sapiens
<400> 2506
Ser Gly Ala Asn Pro Thr Gln Ala Leu Val Trp Ser Gln Val Leu Leu
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10
Ser Met Gly Leu Pro Leu Val Leu Val Pro Leu Ala Arg Phe Thr Gly
           20
Asp Arg Arg Leu Met Gly Gln Trp Thr Asn Gly Arg Val Met Ala Ala
       35
                            40
Ile Ala Trp Ile Val Val Ala Ala Val Ser Ala Leu Asn Val Val Leu
                                            60
   50
Val Val Glu Thr Val Met Gly Ala
                    70
<210> 2507
<211> 922
<212> DNA
<213> Homo sapiens
<400> 2507
nacgcgtgaa gggcagagga gagagaccag tgaaggggga ggaggcggcc aaaaggagac
agetteatge ecccaggaca taaatageee ggetgetgea ggtacetgaa ggagtteagg
acggagcagt gccccctgtt ttcacagcac aagtgcgcgc agcaccggcc gttcacctgc
trecaetgge aettecteaa ceageggege egeaggeece teegeaggeg egaeggeace
ttcaactaca gccccgacgt gtactgctcc aagtacaacg aagccaccgg cgtgtgcccc
gacggcgacg agtgtcccta cctgcaccgg acgacggggg acacagaacg caagtaccac
ctgcgttact acaaaacagg aacctgcatc cacgagacag acgcacgtgg ccactgcgtg
420
aagaatgggc tgcactgtgc cttcgcgcac gggccccatg acctccgctc ccctgtctac
gacatcaggg agcttcaggc catggaggcc ttgcagaatg gccagaccac ggtagagggg
540
agcatagagg gccagtcggc tggggctgcg agccatgcca tgatagaaaa gatcctcagc
gaggagcete ggtggcaaga gactgettat gtgetgggga actataagae ggageettge
aagaagcccc cgcggctgtg ccgccaaggc tatgcctgtc cctactacca caacagcaag
gaccggcggc ggagcccccg gaagcacaaa tacaggtcgt ctccatgtcc aaacgtcaag
cacggggatg agtggggaga ccctggcaag tgtgagaacg gagacgcctg ccagtactgc
cacaccegea ecgageagea gttecacece gagatetaca agtecaceaa gtgcaacgga
agggggggg gggtgaggga gg
922
<210> 2508
<211> 278
<212> PRT
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<213> Homo sapiens

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<400> 2508
Pro Gly Cys Cys Arg Tyr Leu Lys Glu Phe Arg Thr Glu Gln Cys Pro
                                 10
1
Leu Phe Ser Gln His Lys Cys Ala Gln His Arg Pro Phe Thr Cys Phe
                             25
          20
His Trp His Phe Leu Asn Gln Arg Arg Arg Pro Leu Arg Arg Arg
                                            45
      35
                          40
Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn
                    55
                                        60
Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His
                                  75
Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys
                               90
             85
Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys
                             105
                                               110
          100
Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser
                                            125
                         120
Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn
                                        140
                     135
Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala
                 150
                                    155
Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp
                                 170
                                            175
              165
Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys
                             185
         180
Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His
                                           205
                        200
Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser
                      215
  210
Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly
                  230
                                     235
Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu
                               250
              245
Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg
                              265
          260
Gly Gly Gly Val Arg Glu
       275
<210> 2509
<211> 348
<212> DNA
<213> Homo sapiens
<400> 2509
geeggeettg acctgggeeg ggegatgget ceaeggeaag gteeaatact eegtgegett
gttcatgaac gggtggagcc cggcaaaacc gaaactcaac caatccttgg ggatgctgga
cggcaggttg ccgagggcaa acacgttgac cacgttcgca ccgacaccac cgaccacggc
caccgctccc agcggaatct cgtagactta gcgccagggt tggtaaggcg tgtagcggtc
300
```

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gtaacgacgg gtgacctcga actcggggct tcaaagtctt ctgctgtg
<210> 2510
<211> 108
<212> PRT
<213> Homo sapiens
<400> 2510
Met Ala Pro Arg Gln Gly Pro Ile Leu Arg Ala Leu Val Ala Leu Asp
                 5
                                    10
Phe Val Asp Ala Arg Glu Val Leu Leu Pro Ala Thr Ile Gly Leu Asp
                                                    30
            20
Val His Glu Arg Val Glu Pro Gly Lys Thr Glu Thr Gln Pro Ile Leu
                                                45
                            40
Gly Asp Ala Gly Arg Gln Val Ala Glu Gly Lys His Val Asp His Val
                        55
                                            60
   50
Arg Thr Asp Thr Thr Asp His Gly His Arg Ser Gln Arg Asn Leu Val
                                        75
                    70
Asp Leu Ala Pro Gly Leu Val Arg Arg Val Ala Val Val Thr Thr Gly
                85
Asp Leu Glu Leu Gly Ala Ser Lys Ser Ser Ala Val
            100
                                105
<210> 2511
<211> 663
<212> DNA
<213> Homo sapiens
<400> 2511
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tecetgaeta ggetgetgte gttggeteee gtegteaaeg ageaagatet geaagtgete
cctgtcatcg cacacgtcgg tratccgcag gccgccgacg agtattacca gttgctttta
gcattacgcc caggacgcgt tgctggcctg gcggagatcg tcgtcaacgg tcaacctttt
accytcacty acyccactya gyatyaacta geteteacty ettyggetey tatecteete
gagggaacte ceategeeat ggatggateg tggeagetge ategeegteg ageggeeeet
360
gagecagtte ggttegetaa gegetteggt ggtgageaat egaacacete gateatggtg
420
ggcgacgcca tcatcatcaa aatgttccgc cgcctggagc ccggcgacaa ccttgacatc
480
accgtgcata gcgccctcaa cgatgccggg atctcatcgg tggccacatt gtacggcttt
atgtccggac agatccccgc tgaggaacac atcccggtcg atctagctat gatcattgag
aggitgecae agecceggga iggeigggaa eleateacig ceaaggeagi egaletegie
660
gac
663
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